



Interoperability Montana



PROJECT STATUS REPORT for the two week period ending

March 20th, 2009

Prepared By

NORTHROP GRUMMAN



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SECTION 1 – PROJECT DESCRIPTION

Introduction & History

As in many states, communications interoperability between local, state, tribal and federal response communities is a crucial issue. Montana has many challenges to Communications interoperability. Some of these challenges relate to simple ‘operability’ issues, such as the fact that much of Montana’s wireless communication infrastructure is between 10 and 30 years old and is based on wide-band, analog technology that is often unreliable and has high maintenance costs. Montana is the nation’s fourth largest state and is characterized by large amounts of rural areas and challenging topography, resulting in inadequate radio coverage to ensure responder and public safety. In addition, Montana shares a 550-mile border with Canada, which creates unique law enforcement and public safety agency coordination challenges.

End user units are also aging and have inadequate capability, thus limiting interoperability. Most agencies operate in the VHF band in a conventional mode, relying on simplex mutual aid frequencies for interagency cooperation. Several State of Montana and Federal agencies have parallel statewide systems without standard interoperability. Coordination with Canada is also challenging for spectrum management.

Montana is addressing these challenges with the policy-level Statewide Interoperability Executive Council (SIEC) and a locally-led, operational governing board known as the Interoperability Montana Project Directors (IMPD). The SIEC, formed in July, 2002 and comprised of local, state, federal, and other public service agency representatives, provides policy-level direction in matters related to planning, designing and implementing guidelines, best practices and standard approaches to solve Montana's public safety communications interoperability problems. In August 2005, the SIEC adopted a formal definition of interoperability as well as the technical requirements necessary to meet Project 25 Standards (P25) for the state.

The IMPD is a grassroots partnership of local, tribal, and state government agencies and has the primary responsibility for development and execution of the strategy to implement Interoperability Montana (IM) as defined by the SIEC. Nine consortia in the state represent all 56 counties and 7 Tribal Nations. In addition to the nine consortia project directors, three state agencies have voting positions on the IMPD, representing the Montana Department of Natural Resources and Conservation (DNRC), the Montana Department of Transportation (MDOT) and the Montana Highway Patrol (MHP). Consortia directors represent their local or agency communications needs, yet they are



working collaboratively to build a shared system that will improve the safety of residents and first responders. The IMPD has formed sub-committees to define a structure to address short- and long-term maintenance and governance of the IM system as well as to design and implement infrastructure and technical solutions.

With over 1400 users having already converted to a P25 trunked/hybrid configuration, Montana is well on its way to improving the reliability of radio transmission sites, developing trunked radio coverage for use by partners, developing a digital microwave system to connect sites, and providing backbone infrastructure to allow for the future expansion of technologies such as mobile data, remote sensing and data transmission for public entities. The success of this project will open up numerous voice and data opportunities for public safety jurisdictions across the state. No person shall lose his/her life because public safety officials cannot communicate.

Updates from the previous status report are highlighted in yellow.



SECTION 2 – PROBLEMS/ISSUES ENCOUNTERED

Active Problems/Issues

- No new problems have been identified this reporting period.



SECTION 3 - ACTIVITIES IN PROGRESS

Infrastructure & Trunking

Non-Site Specific

- MDT Needs Assessment continues. Questionnaires have been returned and the results are being analyzed and compiled into the Needs Assessment deliverable.
- Work continued on the IMPD 12 site designs.
- NTIP Phase I CATP remains delayed due to road access to test tiles.
- Weather and side conditions continue to prevent the completion of the installations for King, Blue, Pats Knob and Cominco
- Site development issues continue to prevent the completion of the installation for Bull Mountain
- Frequency licensing issues continue to prevent the completion of the installation for Red Mountain
- Delays with Northern Tier fleetmapping is impacting Motorola's ability to build radio code plugs.

Site Specific**Antelope Peak (Beaverhead County)**Activities/Work Currently In Progress At This Site:

- IM Project Management has received a CD containing the AMEC Environmental Assessment (EA) document. Currently waiting for the remaining Environmental Assessment documents from Dynamic Environmental Assessment engineering firm so that all of the PSIC IJ2 and IJ1 Sites can be submitted to FEMA.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- IM Project Management is preparing to send out to Sabre the Infrastructure SOWs for the PSIC IJ2 Sites requesting price quotes.

Previous Activities/Work Completed At This Site:

- IMPM received the Environmental Assessment report from AMEC on February 18. Currently waiting for the electronic version so that we can send it in to FEMA for review and approval.
- IMPM packaged up the Statement of Work with the other PSIC IJ2 sites to be sent to Sabre for pricing.
- IMPM waiting for NEPA approval.
- Received Soil Study from Engineering firm.
- EA study currently under way.
- Soil Study scheduled to be conducted on 11/3.
- IMPM, Facility Manager (Bob McWilliams) and Sabre sub-contractor conducted site visit on 10/27.
- Bob McWilliams (Beaverhead County) has obtained a contractor to conduct the Environmental Assessment Study. The study is scheduled to be completed September 30, 2008.
- The Environmental Assessment work was turned over to Beaverhead County to obtain a contractor.
- NEPA Status: Not Submitted.
- IMPM created draft SOW, site map and shelter layout.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

**Antoine Butte (Phillips County)**Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 5/1/09.

Previous Activities/Work Completed At This Site:

- Motorola brought this site into wide area trunking for NTIP testing.
- Ice shields were installed over diversity antennas and ODU equipment.
- An ice bridge was installed above generator.
- NEPA Status: Approved.
- Infrastructure (2007):
 - Tower
 - Shelter upgrades (BLM)
 - Generator.& Propane Tank
 - Electrical Work
- Trunking (4 trunked channels, 1 interop channel)
 - Trunked equipment delivered, cold installed (2007).
 - Combiner equipment delivered, cold installed (2007).
 - Antenna system equipment delivered, cold installed (2007).
 - Optimization complete (2007).
 - Frequencies (2007):
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked frequencies license issued.
 - Interoperability frequencies identified, engineered by Motorola.
- Roger Smith (MHP), Dave Clouse (IMPM), and a representative of Harris Stratex completed a site visit to inspect the microwave and infrastructure at this site.
- During the site walk conducted by Roger Smith (MHP) and Dave Clouse (IMPM), it was noted that Generator was indicating overcrank. Four attempts were made to manually start the generator with no success. IM Project Management will work with local representatives to resolve this issue.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Mark Adams, (406) 443-8676, Mark.E.Adams@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

**Beaverhead EOC (Beaverhead County)**Activities/Work Currently In Progress At This Site:

- The NEPA Statement of Work for the microwave and trunking installation is currently being sent to FEMA for their review.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Microwave (2010).

Previous Activities/Work Completed At This Site:

- Motorola delivered high level carrier reports for this site.
- NEPA Status: Approved.
- Thermobond sent a new deadbolt lock to the Facility Manager. It has not been installed yet
- R-56 Pre-Audit site walk was completed by Motorola. Site walk report is being prepared.
- Spectrum fingerprinting was completed by Motorola.
- Infrastructure (100% complete, 2007):
 - Tower
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work
 - Grounding

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Belgian Hill (Pondera County)Activities/Work Currently In Progress At This Site:

- An amended Lease Agreement has been sent to the Air Force.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- The Air Force is considering providing a second shelter and upgrading the electrical service in order to accommodate their radio equipment.
- Trunking (2010 or later)

*Previous Activities/Work Completed At This Site:*

- Regarding crates left at the site, the following response has been received from LeAnn Hermance, Pondera County DES Coordinator, "All is taken care of as of Saturday, August 23, 2008. I billed Harris Stratex for the two individuals who did the clean up."
- A meeting was held with Pondera County officials on 7/29/08 to discuss site development at the Broken Pick site. Upon NEPA approval by DHS the site will be developed using the existing Belgian Hill tower.
- NEPA Status: Approved.
- Infrastructure (100% complete, 2007)
 - Tower
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work
 - Grounding
 - Ice bridge
 - Fence

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Mark Adams, (406) 443-8676, Mark.E.Adams@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Big Mountain (Flathead County)*Activities/Work Currently In Progress At This Site:*

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- Conduit containing cables from the tower to the building was not sealed properly when installed so water was able to get in and is now frozen. This means that no more wires can be run until this conduit is thawed. This problem will need to be corrected before construction can be done at the site.

Future Activities/Work Planned At This Site:

- When approved by the IMFC, IMPM to create Statement of Work for the upgrades.
- IMPM to continue working with the county to help resolve issues.
- Infrastructure upgrades:
 - Upgrade electrical service to 200 amps and add outlets
 - Install additional HVAC system and remove old heater.
 - Install new cable ports, run new cable trays, move cables to new cable trays
- Trunking, 4 trunked channels, 1 interop channel (2008-2009).

*Previous Activities/Work Completed At This Site:*

- IM Project Management is working with Anderson Zurmuehlen to ensure payment for the generator and cable trays is completed.
- DIR 061 was resubmitted to the IM with a reduced amount for the infrastructure upgrades. The Finance Committee tabled the DIR until the work session scheduled for 8/20/08.
- IM Project Management presented Decision Information Request form DIR 061 – Big Mt Infrastructure Upgrades and Trunking to the IM Finance Committee on Monday 7/14/08. The DIR was tabled by the IMFC because the funding is not available at this time. IM Project Management was asked to bring this DIR back to the IMFC in the January 2009 meeting, if it has not been addressed before that.
- NEPA Status: Approved (Original Scope).
- NEPA Status: Approved (Additional Scope).
- Spectrum Fingerprinting team was able to go to the site on 5/1.
- Infrastructure to support microwave (100% complete, 2007)
 - Install 80' tower
 - Soil report
 - Ice bridge
- Infrastructure to support trunking (0% complete, 2008)
 - Additional shelter grounding (2008)
 - Other upgrades as detailed above (2008)
- Microwave hop to Blacktail Mt. (2007)
- IMTC also approved moving trunking for this site to the 2008 construction year.
- A walkthrough for infrastructure was held on 8/12/08. An issue with the covers on conduit entrances was found and reported to Harris Stratex to be fixed.
- An existing, damaged tower is to be removed from the site and the antennas on that tower (Border Patrol) will be moved to the new tower.
- Jack Spillman (Flathead County) worked with the Forest Service and Border Patrol to clear the way to remove the damaged tower on Big Mountain. Work is underway to identify a vendor to bring the tower foundation below grade, backfill and reseed. Border Patrol antennas will be transferred to the new tower.
- The damaged tower on Big Mountain was removed and the foundation reclaimed on September 20th. According to Jack Spillman (Flathead County), the work has been reviewed and approved by Dave Ondov (USFS).
- Flathead County has taken responsibility for some of the infrastructure upgrades that were identified for this site, thus reducing the cost to the IM Project.
- IM project Management revised the DIR 061 to reflect the change in cost to the IM Project and sent it to Kevin Bruski (MDOT) for direction on how to proceed.
- BNSF terminated the microwave and provided cable for the IM to connect their radios into the microwave. BNSF voiced concern about the lack of cable trays on the IM side of the building stating there was no cable tray from the pass through between the BNSF room and the IM room to the radio racks. IM Project Management is working with Jack Spillman (Flathead County) to identify how much cable tray is needed. Jack provided the amount and the cost of the cable tray, which was used to revise DIR 061, which was sent to the IMTC for review.
- The transfer switch has been received and is ready for installation. The generator is scheduled be installed the week of 11/3. The HVAC unit has not yet arrived.



- Kevin Bruski (IM Executive Director) is working with IM Project Management, Flathead County Representatives, and the IM Finance Committee to finalize this site.
- Roger Smith (MHP), Dave Clouse (IMPM), and a representative of Harris Stratex completed a site visit to inspect the microwave and infrastructure at this site on Monday the 10th of November.
- IM Project management presented DIR 112 to the IM Technical Committee, IM Finance Committee, and the IM Project Directors and received approval to reimburse Flathead County for expenditures they have made to install a new generator and cable trays at this site.
- The guy wires that hold the ice shield above the bottom microwave dish snapped causing the shield to tilt down about 15 degrees. Harris Stratex was contacted and arrangements made to get the problem corrected.
- Harris Stratex was able to send someone to the site on the 22nd and the problem with the ice shield was fixed
- IM Project Management is working with Kevin Bruski (IM Executive Director) and Jack Spillman (Flathead County) to put together the NEPA paperwork on this site.
- DHS approved the NEPA for the additional work on this site.
- Sheri Lanz (DES) is working with Cindy Mullaney (Flathead County) to obtain invoicing information to pay the bill for this additional work.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Mark Adams, (406) 443-8676, Mark.E.Adams@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Blacktail (Flathead County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 6/1/09.

Previous Activities/Work Completed At This Site:

- Motorola brought this site into wide area trunking for NTIP testing.
- Flathead County received an award letter to complete the infrastructure upgrade work (DIR 062).
- Motorola delivered the final site design for the site.
- IM Project Management notified the Facility Manager that the procurement process could begin for everything but the cable protection (DIR 084).
- IM Project Management presented DIR 062 - Blacktail – Local estimate and approval for additional infrastructure work - to the Finance Committee who approved it and



- identified funding. The DIR was then presented to the IMPD where it was also approved.
- NEPA Status: Approved (Original Scope).
 - NEPA Status: Not Submitted (Additional Scope).
 - Motorola completed the installation of the trunked equipment.
 - Motorola completed the antenna system design.
 - Infrastructure (2007)
 - Soil report
 - Tower
 - Electrical work
 - Shelter upgrade (completed by NOAA)
 - Trunking (4 trunked channels, 1 interop channel)
 - Trunked equipment delivered to staging.
 - Combining equipment delivered to staging. Changes to frequencies approved by Motorola. Combiner redesign underway.
 - Antenna system placement approved. Antenna design complete.
 - Frequencies (2007):
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked frequencies license issued.
 - Interoperability frequencies identified, engineered by Motorola.
 - This site was included in Motorola Change Order 006 which was approved by the IMPD Executive Board for combiner rework and channel expansion.
 - An infrastructure walkthrough was held on 8/20/08. The infrastructure work was approved by the IMTC.
 - For the infrastructure upgrade work at the site, Sun Electric is the contractor. The county is working with them to develop a schedule but it is not complete at this time. The generator has not been shipped, but Thermo Bond is sending the transfer switch to Sun for immediate installation. Once the generator is on scene (and that is in the works), it can be installed immediately.
 - The generator and transfer switch have arrived for Blacktail. Installation is scheduled for the first week in October.
 - The contractor is scheduled to complete the installation of the transfer panel the week of 10/13.
 - Electrical work is completed, the generator and transfer switch has been installed, and the propane tank has been set up and connected.
 - Roger Smith (MHP), Dave Clouse (IMPM), and a representative of Harris Stratex completed a site visit to inspect the microwave and infrastructure at this site on Monday the 10th of November.
 - During the site walk conducted by Roger Smith (MHP) and Dave Clouse (IMPM), it was noted that the site needs a fire extinguisher. IM Project Management will work with local representatives to get a fire extinguisher placed at this site.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com



- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Blue Mountain (Lincoln County)

Activities/Work Currently In Progress At This Site:

- Roger Smith (IM) and Ron Langley (Electrician) made several attempt to get to this site to complete some electrical work. They were unsuccessful in getting to the top of the mountain.

Issue Currently Affecting This Site:

- Frequencies changed after the delivery of the trunked equipment. Combiner will need re-engineering.
- Decision was made to add an additional trunked channel after the delivery of the trunked equipment. Additional frequencies have not been identified. Combiner will need re-engineering.
- Trunked frequencies search underway. No estimated date for resolution.
- Frequency search and channel expansion will result in combiner modifications.

Future Activities/Work Planned At This Site:

- Infrastructure upgraded (2009): Infrastructure complete pending final inspection.
 - Electrical supply upgraded to 200 amps.
 - 200 amp distribution panel
 - Second propane tank
- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 6/1/09.

Previous Activities/Work Completed At This Site:

- BNSF has completed the following work:
 - Tower extension
 - Grounding halo
 - Ice bridge
 - Generator installation
- Final inspection on this site will be scheduled when the weather allows access.
- Motorola encountered a problem with other vendors mounting antenna in the locations reserved for trunked equipment. They worked with Lincoln County to resolve the problem.
- Microwave circuits are scheduled to be extended from Blue to Big Mountain by 10/22 depending upon availability of rack space at Big Mountain.
- Motorola is assigning a team to complete antenna installation at Blue prior to 10/31.
- The generator installation was scheduled for Monday, Sept 15th.
- Trunked system design is underway.
- Waveguide (ice) bridges have been installed.
- BNSF is prepping for generator installs and scheduling builders to install AC and exhaust fans.
- DIR 063 was approved and state funding identified to pay for it.
- Lincoln County was notified that the procurement for this site can proceed.



- The IM Technical Committee's Executive Committee provided Project Management with specification for the vent fan for this site. This information was passed on to the BNSF representative so he could obtain cost estimates. The cost estimates were received the same day so the DIR could be sent to the Finance Committee.
- Floor plan for equipment layout was approved by Motorola.
- NEPA Status: Not Submitted. Not believed to be necessary for IM work.
- Trunking (4 trunked channels, 1 interop channel)
 - All trunked frequencies licenses not issued.
 - Interoperability frequencies identified.
 - Trunked equipment delivered to staging
 - Combiner equipment delivered to staging. Frequency search and channel expansion will result in combiner modifications.
 - Antenna system order on hold pending frequency search.
- This site was included in Motorola Change Order 006 which was approved by the IMPD Executive Board for combiner rework and channel expansion.
- BNSF is installing the IM's generator and hiring a vendor to install the additional air conditioning unit. The additional air conditioning unit is to be paid for by the IM.
- Air conditioners and vent fan – will be starting on it the week of 8/25/08. Anticipate that it will take 2 to 2 ½ days per site. 16" Dayton fan. Electrician will be installing the thermostat to control the fan. Kevin Fitzpatrick (BNSF) went to the sites and used a marker to draw where the fan and the A/C are to go.
- Tower sections due in any day. BNSF will be putting out a schedule for installation of the tower sections.
- Going to have to pull the outside rack. BNSF will remove it but leave it in the building so that Lincoln County can put it where they want it. There is space for five racks.
- Transfer panels have been ordered. They thought they were in stock so should be here in 2 weeks. If not in stock it could take 6 weeks to get them. Kevin will get a drawing for the electrician.
- Grounding – there is a ground system around the building and BNSF will send a diagram to the electrician so he can tie into the ground system. BNSF will put a ground bus in the IM side of the building. There is no halo in the IM side of the building.
- Training – The electrician has completed the training just has to submit it.
- Surge protection – Kevin says there will be no built-in surge protection. This was brought up primarily with respect to the trunking equipment, but further consultation with Motorola confirmed that the trunking equipment runs off batteries, providing its own surge protection.
- IMPM to confirm the rack layout with Motorola.
- Wave guide bridges are in. Executive Director of the Forest service will be out reviewing the sites next week.
- A shelter layout diagram has been produced and is in the process of approval and modification for new equipment.
- The tower extension, second air conditioner, and external vent fan has been installed.
- The electrician is scheduled to begin work on the Lincoln County Sites the first week of October. The transfer panels are not scheduled to arrive until the middle of



October, so the Electrician will return to the site to connect the transfer panels after they arrive.

- The electrician requested information on how the vent fan and air conditioners should be set up. Bob McWilliams (IMTC Chair) instructed the exhaust fans should be set as primary, heat below 55, exhaust fan from 68 to 80 and air conditioning above 80.
- Electrical work is underway, scheduled to be completed the week of 10/20, but potentially as early as the week of 10/13 depending upon availability of utility crews.
- BNSF provided transfer switches for each King, Blue, and Pinkham so that the electrical work could be completed in one trip to each site. This will expedite the completion of these sites, scheduled for the week of 11/3.
- The electrician has completed the work on this site. Roger Guches (Lincoln County Sheriff's Office) scheduling a trip to the site to complete an inspection and either approve or deny payment.
- Infrastructure work on this site has been completed. IM Project Management will be scheduling a final walkthrough on the site as soon as access is available.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406)583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Broken Pick (Pondera County)

Activities/Work Currently In Progress At This Site:

- Procurement has been sent out, the County has received questions, IM Project Management is working with the Facility Manager to resolve any vendor questions regarding the infrastructure upgrades.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Infrastructure (12% complete, 2009):
 - Used Guyed Tower
 - Electrical Work
 - Used shelter-generator combo from Blaine County
 - Fence
- Single conventional VHF repeater

*Previous Activities/Work Completed At This Site:*

- IMPM and Pondera County representatives discussed procurement and next steps for the site build out.
- Pondera County received the Award Letter. They have scheduled a meeting on December 31 to discuss next steps for procurement.
- IMPM received faxed copy of the signed Statement of Work from Pondera County, IMPD Chairman Chief Michaels signed and returned a faxed copy. Bill Fleiner is working on getting the Award Letter out to the County.
- IMPM made modifications to the Statement of Work as requested by the County. This change was in responsibility list, from the County to the Contractor.
- IMPM sent an updated Statement of Work to Facility Manager for review and approval, which is currently being reviewed by Pondera County.
- IMPM is working with the Facility Manager on updating the SOW. The County was looking at using the 150' guyed tower at the Belgian Hill site to install a 100' at Broken Pick, their concern is that they would not have any radio coverage while this is taking place unless they can install their antenna's on the new 100' tower at Belgian before dismantling the 150' tower at Belgian Hill. The guyed tower at Sunset could still be used at Broken Pick if need be. Discussions are taking place to determine how best to proceed.
- NEPA Status: Approved.
- A meeting was held on 7/25/08 with the County Commissioners, Pondera County Sheriff, LeAnn Hermance (Pondera County), Bill Fleiner (IM Governance), Sheri Lanz (DES) via conference call, Mark Adams (NGC), and Tom Smith (IMPM) to discuss what work is to be completed at the site and who was providing what equipment. The plan for the development for the site was discussed and agreed upon. Tom Smith and LeAnn will modify the Statement of Work for the site to reflect the decisions reached. The NEPA is still outstanding
- PSSB received the cultural study report from the Blackfeet Historic Preservation Officer.
- The IM Project does not need a Site Lease or Site Users Agreement documents for this site.
- Pondera County agreed to allow the IM to turn on the Microwave at the Belgian Hill site.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com

Bull Mountain (Jefferson County)*Activities/Work Currently In Progress At This Site:*

- Sabre construction crew is tentatively scheduled to start the 2nd week of March for the concrete work for the shelter, propane tank, and generator.
- IM Project Management is currently waiting for the Environmental Assessment documents from Dynamic Environmental Assessment engineering firm so that all of the PSIC IJ1 Sites can be submitted to FEMA.
- Infrastructure Statement of Work is ready to send to Sabre requesting price quotes for the new 100 tower.



- BLM is reviewing the 299 request for a 100 foot tower.

Issue Currently Affecting This Site:

- Trunked design is dependent upon the design of the infrastructure upgrades.
- Trunked equipment installation is dependent upon the completion of the infrastructure upgrades.

Future Activities/Work Planned At This Site:

- Infrastructure (36% complete, 2009):
 - New NEPA for new 100' Tower
 - Shelter delivered to site.
 - Larger generator.& propane tank
 - Electrical work
- Microwave upgrades (2008)
- No interoperability frequencies. No estimated date for resolution.
- Trunking, 4 trunked channels, 1 interop channel (2009)
 - Antenna system design underway.

Previous Activities/Work Completed At This Site:

- Trunked radio equipment is cold installed in the shelter on-site in Whitehall.
- EA study currently under way, report rescheduled to be submitted to IM the first week of April 2009.
- IMPM sent signed BLM 299 form and supporting site documents to BLM Office for their review regarding the 100 foot tower.
- Jefferson County received the Building Permit, which was forwarded to Sabre so they could get the electrical permit started.
- The new 85Kw generator has been ordered by Sabre, it is due to be shipped in April.
- Notice to Proceed letter was sent to Sabre. Sabre is currently working on a construction schedule.
- Jefferson received the Award Letter.
- Most of the utility pole has been removed by Jefferson County, a back hoe will be need to remove the remaining portions as they are buried.
- EA study currently under way, report scheduled to be submitted to IM the first week of February 2009.
- Waiting for Award Letter to be sent to the County.
- Jefferson County started work on removing the wooded utility pole.
- IMPM discussed a 100' tower with BLM, they want an engineering report specifying the need to go to the additional height
- Facility manager received approval from BLM to proceed with 60' tower. IM Tech Committee has determined that a 100' tower is required for antenna separation. IMPM is working on 299 Form requesting additional tower height.
- IMTC, IMFC and IMPD approved DIR 112 to proceed with Sabre quote for Infrastructure Upgrades.
- The engineering company conducted site visit for Soil Study the week of 11/3.
- IMPM received site infrastructure quote from SABRE. IMPM and Kevin Bruski (IM Executive Director) discussed quote with SABRE as a couple of items were higher



- that the State Contract quote. IMPM also received a ballpark quote from Timberline Communications Inc. No decision has been made yet.
- IMPM is working with BLM to obtain a copy of the original Soil Study.
 - IMPM and Sabre sub-contractor conducted site visit on 10/22.
 - EA study for the new tower is currently scheduled for 11/10.
 - The procurement vehicle with the State of Montana has been completed and is available to use for the Bull Mountain site development. The Statement of Work was reviewed with the IM Technical Administrative Committee. Upon final review and approval, it will be sent to procurement.
 - Motorola completed the cold installation of trunked equipment at Bull Mountain.
 - IMPM was asked to prepare a cost-benefit analysis of the options related to carrying microwave traffic through Bull Mountain.
 - PSSB is working with Facility Manager for procurement to move the shelter to the site and to purchase and install the generator and propane tank.
 - IMPM developed the Statement of Work for the NEPA Environmental Assessment study.
 - IMPM updated the Site Map based on request from BLM. This was sent to BLM and to Sheriff Doolittle (Jefferson County) so that he can proceed with procurement.
 - BLM sent a new amendment decision (Categorical Exclusion Document and Decision) to Sheriff Doolittle.
 - BLM is reviewing the request to install the new tower, a possibility that an Environmental Assessment may be required by BLM.
 - Jefferson County is sending the Statement of Work for the shelter and propane installations out for bid quotes.
 - A 60' tower section from the Blacktail site has been delivered to the Bull Mountain site.
 - Roger Smith (MHP) and IMPM conducted a site visit to establish the location of the new tower. IMPM updated the site map and sent a copy to BLM for their review.
 - NEPA Status: Approved (Original Scope).
 - NEPA Status: Not Submitted (Additional Scope).
 - Sabre reported that the foundation for the existing tower could not support an additional 20' tower section to be added. Roger Smith (MHP) is recommending that we install the 60' of tower that is currently at Blacktail be installed at Bull. IMPM has sent a request to BLM to install this 60' tower at the site and what documents would be required by BLM to get this approved.
 - Infrastructure (100% complete, 2007):
 - Electrical engineering
 - Shelter delivered to Whitehall.
 - Original generator.& propane tank
 - Trunking
 - Trunked equipment delivered to staging.
 - Combiner equipment delivered to staging.
 - Antenna system design underway.
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.



- Trunked frequencies license issued.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Coburn (Yellowstone County)

Activities/Work Currently In Progress At This Site:

- Dynamic Environment is waiting on responses from some of the Tribal Nations so they can complete the Environmental Assessment on this site.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- NEPA Status: Under Contract
- Infrastructure (2009):
 - Tower
 - Shelter
 - Generator & Propane Tank
 - Electrical Work
 - Fence
- Microwave (2009)
- Trunking (2011)

Previous Activities/Work Completed At This Site:

- SOWs for the NEPA study and Soil Survey were completed and sent to PSSB for procurement.
- IMPM completed a site walk on this site with Dale Osborne of the MHP. Correct coordinates were obtained and a report will be written up about the site
- IMPM began creating NEPA and Soil Sample Statement of Work documents to go out for bid for this site.
- A contract was signed to complete NEPA work on this site. The contractor is scheduled to conduct site visits the first week of November.
- Also, Sabre was contracted to complete upgrades to this site and will be conducting soil sample work on this site the 2nd week of November. Tower Systems out of South Dakota will be completing the infrastructure upgrades for Sabre and will be reviewing this site on Tuesday 11/4.
- Bruce Brown (FBI) and Dale A. Holzheimer (IC&E radio shop) visited this site on Tuesday, November 4th with Ron Schafer (Tower Systems). Mr. Schafer will be bidding on this site as a subcontractor to Sabre.



- IM Project Management coordinated with David Jermakian (Dynamic Environmental, Inc.) to complete an Environmental Assessment in accordance with the National Environmental Policy Act (NEPA). This process ensures that changes to the site will not have a negative impact on the environment.
- Dynamic Environmental Inc. visited this site to begin the environmental assessment required by the NEPA process.
- GeoScience visited this site to begin the soil survey process. They provided a report based on their study to IM Project Management.
- IM Project Management is gathering the FEMA IB 271 requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.
- IM Project Management is working with IM Tech representatives to get corrected coordinates for this site.
- Roger Smith (MHP) and Dale Osborne (MHP) visited this site on Tuesday, January 20th to get corrected coordinates. Roger will get the coordinates to the IM Project Management so that they can be forwarded to the company doing the Environmental Assessment study.
- Roger Smith (MHP) is downloading the coordinates taken during his last trip to this site and will pass them on to Project Management.
- IM Project Management obtained the coordinates for this site from Roger Smith (MHP) and passed them on to Dynamic Environmental.
- IM Project Management is changing the Statement of Work for this site into the revised format.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Cominco (Powell County)

Activities/Work Currently In Progress At This Site:

- IM Project Management is working on getting the remaining local combiner information so that the non-trunked combiner can be ordered. A new request was sent to the combiner engineering company requesting that it be redesigned for 2 antenna's instead of one.

Issue Currently Affecting This Site:

- Completion of trunked radio equipment is pending site access.
- No interoperability frequencies. No estimated date for resolution.

Future Activities/Work Planned At This Site:

- DIR for Generator Vent Snorkels
- Trunking (4 trunked channels, 1 interop channel, 2009)

Previous Activities/Work Completed At This Site:



- Modifications to the generator are ready to be completed pending site access.
- IMPM and Roger Smith (MHP) conducted a site walk on 8/21/2008 to validate all work at the site. Contracted work was approved and signed off. Roger recommended that snorkels be added to the generator intake and exhaust vents to get them above the roof line and above the snow levels.
- The generator has been repaired, the pulley still has some play in it, the plan is to monitor the generator pulley operation.
- Mike Green (TWE) repaired the generator. IMPM and Roger Smith (MHP) is scheduled to conduct a site walk to validate all work at the site.
- NEPA Status: Approved.
- IMPM contacted Sheriff Howard (Powell County) regarding the generator problems, the Sheriff has not had time to contact TWE to discuss solutions for the generator, but hopes to get to it soon.
- The FCC has denied the trunked license. Scott Bradford (IMTC Frequency Subcommittee Chair) has submitted another license application and is working with the FCC to obtain an STA.
- Trunking (4 trunked channels, 1 interop channel, 2008)
 - Interoperability frequencies search underway.
- Infrastructure (100% complete, 2007 – See Issues):
 - Tower
 - Shelter
 - Generator & Propane Tank
 - Electrical Work
- Microwave (2007)
- Trunking (2008)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked equipment delivered to site.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Cooney (Wheatland County)

Activities/Work Currently In Progress At This Site:

- IMPM working with Air Force, Facility Manager, and CMIC in obtaining Air Force Amended Lease Agreement. The AF is reviewing the revised lease.

Project Delay - Issue Currently Affecting This Site:

- Air Force Sub-Lease, Bill of Sale, and Right of entry agreements have not been completed and have been forwarded to the Air Force Space Command level. This delay may mean the site will not be constructed this year.

*Issue Currently Affecting This Site:*

- Air Force sub-lease process has not been completed.
- The Site Sub-Lease, Bill of Sale, and Right of entry are at Air Force Space Command level legal office. The agreements will be completed in time for this construction season.

Future IM Activities/Work Planned At This Site:

- Trunking (2011)
- Microwave – equipment moved from Blue-Pinkham-King under a National Guard contract.

Future AIRFORCE Activities/Work Planned At This Site:

- Infrastructure (2009)
 - 150 ft Tower
 - Shelter with internal Generator
 - Propane Tank
 - Electrical Work & Upgrades
 - Fence

Previous Activities/Work Completed At This Site:

- Air Force funded site. SI International is responsible for all contracting and project management. Sub-Lease, Right of Entry for Construction, and Real Property transfer to the local agency has not been finished by the Air Force legal and is delaying contracting. Site walks by vendors as part of the bidding process by SI International (AF project) were completed (April 28-29, 2008) Estimated completion of the site can not be determined until legal process is completed.
- Vendor site visits as part of AF procurement process
- Geo-Tec analysis for tower foundation
- Site visit by microwave engineer as part of microwave final design
- MTNG signed contract to install microwave between S. Moccasin → Garneil → Cooney. The microwave equipment is moved from the NTIP project Blue → Pinkham → Big Mountain
- Fergus Electric engineering and contracting process with SI International for power line work.

Air Force Agreement Status:

- EA (Environmental Assessment) – completed - Dave Hinds, Malmstrom AFB
- Site Use Agreement – in progress - Dave Hinds, Malmstrom AFB
- Site Sub-Lease – in progress - Dave Hinds, Malmstrom AFB
- Economic Analysis – completed - Dave Hinds, Malmstrom AFB
- Bill of Sale – transfer of property to local agency – in progress - Dave Hinds, Malmstrom AFB
- Dept of Air Force right of entry for construction – in progress - Dave Hinds, Malmstrom AFB

NOTE: SI International is responsible for construction activities at this site.



Kevin Bruski (MDOT) was appointed by the IMPD to be the point of contact and coordinate with the AF project managers. Dave Clouse is assigned to assist Kevin Bruski as requested.

IM Project Managers For This Site:

IM Project has no infrastructure responsibilities at this site

- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Culbertson (Roosevelt County)

Activities/Work Currently In Progress At This Site:

- IM Project Management is working on NEPA requirements for this site to install the microwave equipment that will carry the microwave south into the Eastern Tier.
- Motorola ordered the combining equipment for the frequency changes and channel expansion for this site.
- Microwave connectivity has been established between this site and the LEC in Helena. Motorola has successfully communicated with the trunked radio equipment from the Master Controller.
- Motorola has completed the frequency rework designs for this site.

Issue Currently Affecting This Site:

- Frequencies changed after the delivery of the trunked equipment. Combiner will need re-engineering.
- Decision was made to add an additional trunked channel after the delivery of the trunked equipment. Additional frequencies have not been identified. Combiner will need re-engineering.
- Frequency search and channel expansion will result in combiner modifications.

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 8/26/09.
- Microwave hop to Scout Hill (2011)
- Microwave hop to Fox Creek (2011)

Previous Activities/Work Completed At This Site:

- A follow-up walkthrough must be held at Culbertson to make sure the generator works as required.
- Roger Smith (MHP) and Dave Clouse (IMPM) did the site walk on this site.
- Trunked frequencies search underway. No estimated date for resolution.
- TAB Electronics has committed to having the Roosevelt County microwave system installed, tested, and ready for acceptance by 11/1/2008.
- NEPA Status: Approved.
- Infrastructure (100% complete, 2007):
 - Soil report
 - Tower



- Shelter (supplied by MDoT)
- Generator & Propane Tank (supplied by MDoT)
- Electrical Work
- Fence
- Trunking (2009)
 - Trunked equipment delivered, cold installed.
 - Combiner equipment delivered.
 - Antenna system equipment delivered, installed.
- Roger Smith (MHP), IM Project Management, and Dan Seitesema (Roosevelt County) visited the site to connect the microwave leads. When completed, Roger was able to connect to the Deadman Butte site.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Deadman Butte (McCone County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- None

Previous Activities/Work Completed At This Site:

- Infrastructure (2008):
 - Tower (80% Complete)
 - Shelter (95% complete)
 - Generator & Propane Tank (80% Complete)
 - Electrical Work (95% Complete)
- Microwave hops to Gideon and Scout Hill (2008)
- Microwave hop to Wright (2010 or later)
- All site agreements are in place.
- NEPA Status: Approved.
- Site development work was awarded and the contract signed on 5/21/08.
- Soil report received.
- According to Roosevelt County, the infrastructure work will be complete by 10/1/2008.
- The tower steel is scheduled to be delivered 9/4/08.



- The tower base is to be dug and poured the weekend of 9/6/08. It will then need to cure for approximately one week.
- The tower is scheduled to be stacked 9/17/08 or 9/18/08.
- The shelter is scheduled to be delivered 9/15/08.
- TAB Electronics has committed to having the Roosevelt County microwave system installed, tested, and ready for acceptance by 11/1/2008.
- Northwest Tower dug the holes and poured the concrete for the tower foundation on Thursday, Sept 11.
- The shelter is scheduled to be delivered to the site the week of Sept 15th.
- Northwest Tower has scheduled a crane to be at the site on Wednesday Sept. 17th.
- Pete Mohan with PSSB has completed the paperwork for the building permit.
- Northwest Tower poured the concrete pad for the building and the generator on Sept 15th. The shelter and generator was delivered Sept 17th and set on the pads.
- Dan Seitsema (Roosevelt County DES) delivered the Microwave dishes and radios to the site on Sept 19th.
- Northwest Tower has set a November 1, 2008 completion date for the infrastructure work at this site.
- The tower for this site arrived on site, was stacked, and at least one dish hung this week. IM Project Management reviewed the site Sunday November 2nd. The fence and propane tank are scheduled to be installed and grounded the week of 11/3.
- TAB Electronics is working on the microwave that will connect this site to the Windy Hill site.
- One of the dishes that TAB Electronics had at the site was damaged before they were able to get it hung. This dish was to provide microwave connectivity to the Windy Hill site. Roosevelt County, TAB Electronics, and Northwest Towers are working with Dave Clouse (NGC) and Roger Smith (MHP) to obtain a dish that belongs to the IM Project as a replacement dish for this site.
- When the dish is available to hang on the tower, Northwest Towers and TAB Electronics will complete the work on this site. IM Project Management will be scheduling a site walk to complete a final inspection.
- Roger Smith (MHP) and Dave Clouse (NGC) worked with Dan Sietsema (Roosevelt County DES), Northwest Tower (Missoula), TAB Electronics (Glendive), and Dunne Communications (Augusta) to identify an available dish that could replace the damaged one. Northwest Tower was scheduled to pick up the dish on Monday, December 15th, take it to the site and hang it on Wednesday, December 17th. That schedule had to be put on hold due to a storm that moved into the state. This dish will probably be hung after the first of the year.
- Northwest Tower was told that 2 grounding cable were accidentally cut when the propane tank was being installed. They will be repairing those cables when they go to the site to hang the dish.
- Northwest Towers returned to the site on Tuesday, January 6th with the new dish. They were able to hang the dish Wednesday but not able to complete the grounding work due to the frozen ground.
- TW Enterprises is scheduled to start the generator the week of January 19th.
- Northwest Tower returned to this site on Tuesday, January 20th to complete the alignment of the last microwave dish that points to the Windy Hill site. Roosevelt County representative reported that the microwave was working across their county.



- Roger Smith (MHP), IM Project Management, and Dan Sietsema (Roosevelt County) conducted a site inspection on January 23rd.
- The contractor has completed all milestones on this site except to remove the old site. They will not be able to complete that portion until the ground thaws.
- Correction on the last status of this site: Roosevelt County already has their radios moved to the new building and their antennas on the new tower. Northwest Tower will remove the old site when the ground thaws enough for them to dig. The pole that was used for the antennas on the old site will stay so the power company can use it to replace their pole.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406)583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Divide Mountain (Blackfeet Nation and Glacier National Park)

Activities/Work Currently In Progress At This Site:

- The roof was replaced with all metal roofing.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 5/1/09.
- IM Project Management is working with local representative to get permission from the Tribal Council to place add a generator and place it on a snow stand, along with adding a propane tank to the site. This generator work is going to be postponed until next year due to a certainty that the FEMA EHP Review work will take too long to get it reviewed this year. That EHP Review process will be started as soon as the IM has an approved mechanism in place to contract with vendors to do the site studies.
- Generator and propane tank (unknown).

Previous Activities/Work Completed At This Site:

- Microwave hop to Santa Rita (2008).
- Permanent electricity at the site is waiting on an MOU between the users on the site. Permission was granted to turn it on long enough for equipment to be installed.
- Frequencies changed after the delivery of the trunked equipment. Combiner will need re-engineering.
- Decision was made to add an additional trunked channel after the delivery of the trunked equipment.
- Channel expansion will result in combiner modifications.
- Motorola brought this site into wide area trunking for NTIP testing.



- IMPM checked with representative of the Blackfeet Tribe to see if they had given permission for the installation of the generator and the snow platform. This decision is pending the agreement of an MOU between the Tribe and Glacier National Park. The MOU has been drafted and is under review by Glacier National Park attorneys.
- Motorola has begun the combiner re-work for Divide.
- Motorola is scheduled to complete optimizations the last week in September.
- Motorola cold-installed the trunked radio equipment the week of 7/21/08.
- Harris Stratex installed the microwave equipment the week of 7/21/08. Path testing is pending.
- Trunked radio antenna equipment has been ordered.
- According to Glacier Park, the roof has been repaired, the power is on and the site is ready for testing.
- Glacier Park is creating a Memorandum of Understanding between all the users that will have a presence at the site. Once this MOU has been accepted and signed by all users they will allow the electricity to be added to the building.
- Motorola delivered the final site design for the site.
- NEPA Status: Not Submitted.
- Infrastructure (90% complete, 2007, completed by Glacier Park – See Issues):
 - Tower
 - Shelter
 - Electrical Work
- Trunking (4 trunked channels, 1 interop channel, 2007)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked frequencies license issued.
 - Interoperability frequencies identified, engineered by Motorola.
 - Trunked equipment delivered to staging
 - Combiner equipment delivered to staging.
- This site was included in Motorola Change Order 006 which was approved by the IMPD Executive Board for combiner rework and channel expansion.
- The Blackfeet Tribal Business Council signed the resolution to recognize the Blackfeet Tribal Employment Rights Office (TERO) Fees and Blackfeet Revenue Department Tax Fees as an “in-kind” contribution from the Blackfeet Tribe, The Blackfeet Tribe will honor this resolution once the “site-use agreement” is signed between the Blackfeet Tribe and Glacier National Park.
- IMPM created DIR 064 for the generator and propane tank. It was presented to the IMTC for approval and the IMFC for funding. Funding has not yet been identified.
- Site manager is coordinating efforts to complete the electrical work.
- Motorola has completed the antenna design.
- According to Glacier Park, the contractor was to begin repairing the roof 8/20/08. This didn’t happen. New date: 9/26/08.
- While working at the Divide site on Monday 10/13, a Motorola crew identified the following issues:
 - There are missing bolts from some of the cross members on the tower. It was also noticed that one of the cross member bolts was not tightened at the base of the tower. Based on these finding a thorough check of all hardware on the tower is likely required and any issues rectified.



- The door to the shelter will not shut completely to allow locking of the dead bolt. The door knob will barely latch and could be easily opened with a screw driver if one were persistent enough. It appears that the door frame is warped/bent, but its not clear how/why.
- Tim Gilk (Glacier National Park) was informed of the above issues and is in the process of getting a tower inspection completed as well as checking out the door.
- Nora Kennedy (Blackfeet Tribe), has obtained permission from the tribal council to place a generator on a snow platform and connect a propane tank.
- The IM project has signed a contract with a company to complete the NEPA studies on several sites in Montana including Divide. The company plans to be in Montana the middle of November to review the sites.
- IM Project Management was informed that the shelter at this site sustained damage from strong winds. A local radio shop assisted by going to the site to power down the radios and cover them. Tim Gilk (Glacier National Park) is working with Thermo Bond to get the shelter roof fixed and find a way to prevent it from receiving damage again.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Duck Creek (Gallatin County)

Activities/Work Currently In Progress At This Site:

- IM Project Management waiting for the Environmental Assessment study to be completed, currently scheduled for end of March.
- IM Project Management to send out to Sabre the Infrastructure SOWs for the PSIC IJ2 Sites requesting price quotes.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Infrastructure (15% complete, 2008-2009):
 - Generator & Propane Tank
 - Fence
 - Possibly add additional HVAC unit
- Microwave hop to Sawtell (2009)
- Trunking (2010 or later)
- NEPA Status: Not Submitted.

Previous Activities/Work Completed At This Site:

- EA study currently under way, report rescheduled to be submitted to IM the first week of April 2009.



- IMPM working on gathering the FEMA IB 271 Requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.
- IMPM provided copies of Statement of Work to IMTC Chair and IM Executive Director for review.
- NEPA Environmental Assessment Compliance study scheduled for 11/7.
- IMPM, IMTC Chairman (Bob McWilliams), and Sabre sub-contractor conducted site visit on 10/28.
- IMPM developed the Statement of Work for the NEPA Environmental Assessment study which PSSB is packaging to send out for procurement.
- IMPM created the FEMA NEPA Compliance Statement of Work and sending it to DMA for procurement. The purpose is for gathering information for the IB 271 requirements.
- Kevin Bruski (MDoT) is working with the site personnel to obtain the fencing needs. Kevin is providing a sketch to the site personnel for approval, MDoT will install the fencing once the materials have been procured.
- Infrastructure (2007, completed by MDoT):
 - Tower
 - Shelter
 - Electrical Work

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Dunn Mountain (Yellowstone County)

Activities/Work Currently In Progress At This Site:

- Dynamic Environment is waiting on responses from some of the Tribal Nations so they can complete the Environmental Assessment on this site.

Issue Currently Affecting This Site:

- Some problems with leases being looked into by Jim Kraft (Yellowstone County).

Future Activities/Work Planned At This Site:

- NEPA Status: Not Submitted.
- Infrastructure (2% complete, 2009):
 - Tower
 - Shelter
 - Generator & Propane Tank
 - Electrical Work
 - Fence
- Microwave hop to Billings (2009)
- Microwave hop to Pompey's Pillar (2009)



- Trunking (2010 or later)

Previous Activities/Work Completed At This Site:

- IMPM began creating NEPA and Soil Sample Statement of Work documents to go out for bid for this site.
- IMPM completed the NEPA study and Soil Sample Statement of Work documents and sent them to PSSB for procurement.
- Roger Smith (MHP) and Dale Osborne (MHP) are working with BLM to obtain permission to move the tower and shelter from the Yellowstone County Bull Mountain site to Dunn Mountain. They visited the Yellowstone County Bull Mountain site on Wednesday October 22nd to review the tower and shelter. This will be a huge savings to the IM Project as well as provide better coverage for all agencies involved.
- A contract was signed to complete NEPA work on this site. The contractor is scheduled to conduct site visits the middle of November.
- Also, Sabre was contracted to complete upgrades to this site and will be conducting soil sample work on this site the 2nd week of November. Tower Systems out of South Dakota will be completing the infrastructure upgrades for Sabre and will be reviewing this site on Tuesday 11/4.
- IM Project Management, Bruce Brown (FBI) and Dale A. Holzheimer (IC&E radio shop) in Billings visited this site on Tuesday, November 4th with Ron Schafer (Tower Systems). Mr. Schafer will be bidding on this site as a subcontractor to Sabre.
- IM Project Management coordinated with David Jermakian (Dynamic Environmental, Inc.) to complete an Environmental Assessment in accordance with the National Environmental Policy Act (NEPA). This process ensures that changes to the site will not have a negative impact on the environment.
- Dynamic Environmental Inc. visited this site to begin the environmental assessment required by the NEPA process.
- GeoScience visited this site to begin the soil survey process. They provided a report based on their study to IM Project Management.
- IM Project Management is gathering the FEMA IB 271 requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.
- Jim Kraft, Yellowstone County DES Coordinator, is working with the land owner to write a site lease agreement for Yellowstone County.
- IM Project Management is changing the Statement of Work for this site into the revised format.
- Jim Kraft (Yellowstone County DES Coordinator) obtained the landlord's signature on the lease agreement for this site. He will be working with the County Commissioners to finalize the lease.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Ellis Beaverhead (Beaverhead County)

Activities/Work Currently In Progress At This Site:

- IM Project Management received CD containing the AMEC Environmental Assessment document. Currently waiting for the remaining Environmental Assessment documents from Dynamic Environmental Assessment engineering firm so that all of the PSIC IJ2 and IJ1 Sites can be submitted to FEMA.
- IM Project Management is preparing to send out to Sabre the Infrastructure SOWs for the PSIC IJ2 Sites requesting price quotes.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- IMPM to start on next steps for procurement.
- Local vs. IM Procurement
- Infrastructure (10% complete, 2009):
 - Tower
 - Shelter
 - Generator & Propane Tank
 - Electrical Work
 - Fence
- Microwave hop to Mauer (2009)
- Microwave hop to KONA (2009)
- Trunking (2013)

Previous Activities/Work Completed At This Site:

- IMPM received the Environmental Assessment report from AMEC on February 18. Currently waiting for the electronic version so that we can send it in to FEMA for review and approval.
- IMPM packaged up the Statement of Work with the other PSIC IJ2 sites to be sent to Sabre for pricing.
- Received Soil Study Report.
- IMPM provided copies of Statement of Work to IMTC Chair and IM Executive Director for review.
- EA study currently underway.
- Soil Study scheduled to be conducted on 11/3.
- IMPM, Facility Manager (Bob McWilliams) and Sabre sub-contractor conducted site visit on 10/27.
- NEPA Status: Not Submitted. Environmental Assessment in progress.
- Bob McWilliams (Beaverhead County) has obtained a contractor to conduct the Environmental Assessment Study. The study is scheduled to be completed September 30, 2008.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave



- Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Fallon (Dawson County)

Activities/Work Currently In Progress At This Site:

- No activity during this reporting period.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Infrastructure (65% complete)
 - Tower Upgrade
 - Shelter Upgrade
 - Generator.& Propane Tank
 - Electrical Work.
- IMPM to work with all users to get Tower Drawings completed for this site.
- IMPM to follow up with Dale about the cornucopias.
- Sabre is scheduled to begin construction on this site May 28th.
- Microwave hop to Government Hill (2011)
- Microwave hop to Makoshika (2011)
- Trunking (2010)
- TW Enterprises of Billings will be completing the generator hookup, initial startup, and load testing.

Previous Activities/Work Completed At This Site:

- NEPA Status: Approved.
- All site agreements are in place.
- Prairie County decided to not utilize this tower.
- Sabre scheduled TW Enterprises to complete the generator startup on Wednesday, July 16. Unfortunately they has the wrong key so were unable to access the site. The cores have not been changed on that site. TW Enterprises said they would come back when the correct key is available
- TW Enterprises successfully completed the generator startup on Monday, July 28th with the facility manager, IM Project Management, and a representative of the County Commissioners on hand.
- Roger Smith, IM Project Management, the facility manager, and the consortium technical representative conducted a site walk through to complete the infrastructure signoff checklist on Tuesday, July 29th. A few questions were noted for the contractor.
- IMPM is working with contractor to finalize this site.
- Contractor has scheduled the week of the 15th to finalized the items on the punch list.
- Sabre was at the site on 9/16 to complete the punch list items. IM Project Management is scheduling a site visit with Dale Osborne (MHP) to verify the work.



- IMPM, Dale Osborne (MHP), and Chief Alan Michaels (Facility Manager) conducted a walkthrough on Wednesday, October 1, 2008. Dale checked the grounding to ensure all the corrections were completed. Dale found some readings that were high and other connections produced no reading at all. Also, the ground bus bar that was suppose to be installed at the 100 foot level could not be located. All other punchlist items were completed satisfactorily.
- After consulting with Roger Smith (MHP), IM Project Management completed a new punchlist of items that needed to be corrected at this site. The punchlist was sent to Sabre. Sabre responded with a clarification on why the OLM readings were not showing correctly. IM technical people are reviewing the references provided by Sabre and will make a decision based on the results of their research.
- A determination was made by the IMTC on the grounding that the places that showed high readings needed to be corrected which in this case is the northeast corner post on the fence.
- Sabre subcontractor, SlaterCom, was scheduled to repair the grounding at this site on December 16th but a winter storm that passed through the state dropped the temperatures to well below zero and precluded them from doing the work. The work will be done when the weather allows.
- IM Project Management is working with SlaterCom (Sabre subcontractor) to schedule their return to this site so they can complete all the punchlist items that are outstanding.
- SlaterCom visited this site on 2/9/09 and determined that the grounding was all working correctly.
- IM Project Management, Roger Smith (MHP), and Dale Osborne (MHP) completed a site visit on 2/17/09 and Roger gave his final approval of the site. While there it was noted that there was a problem with the generator. IM Project management is working with TW Enterprises to see if it is an issue or not.
- IM Project Management gave the approval for the final bill to be paid on this site.
- Dale Osborne (MHP) stopped by on his way to Glendive and checked the generator.
- IM Project Management visited the site on 2/24 to turn on the breaker for the battery charger to see if that would charge the battery up enough to start the generator. On 2/25 Dale Osborne visited the site on his way past to see if the battery had charged. It hadn't so he stopped on his way by on March 4th and jumped it. He was able to start the generator and let it run long enough to charge up the battery. Problem solved.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Flaxville (Daniels County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- None

Previous Activities/Work Completed At This Site:

- NEPA Status: Approved.
- Infrastructure (100% complete, 2007):
 - Tower
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work
- Microwave hop to Scobey (2007)
- Microwave hop to Plentywood (2007)

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

Flying J (Cascade County)Activities/Work Currently In Progress At This Site:

- IM Project Management is working with Air Force, Facility Manager, and CMIC in obtaining Air Force Amended Lease Agreement.

Issue Currently Affecting This Site:

- No interoperability frequencies. No estimated date for resolution.

Future Activities/Work Planned At This Site:

- Motorola is scheduled to complete antenna system installation and optimizations by 3/6.
- Microwave hop to Pacific Steel (2009)
- Trunking (4 trunked channels, 1 interop channel, 2009)
 - Combiner equipment order pending frequencies.
 - Antenna system order pending design completion.
- Microwave hop to Highwood Baldy (2009)

Previous Activities/Work Completed At This Site:

- Microwave hop to Sullivan (May 2008)
- Motorola installed trunked radio equipment at the Flying J site.
- IMPM and Roger Smith (MHP) conducted a site visit to validate that the work has been completed. Grounding is still an issue. A meeting has been scheduled to discuss the grounding issues with Sabre.



- Trunked radio antenna equipment has been ordered.
- NEPA Status: Approved.
- Motorola has delivered the trunked radio equipment.
- Sabre fixed the grounding issues.
- Motorola completed the frequency analysis and submitted a tentative frequency plan. Frequency Analysis was approved by Scott Bradford (PSSB) on 5/20/08.
- Trunking (4 trunked channels, 1 interop channel, 2008)
 - Trunked equipment on order.
- Infrastructure (100% complete, 2007):
 - Tower
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Fort Harrison (L&C County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- Tower may not be strong enough for additional dishes, which are needed for the microwave upgrade for the passive path between the Fort Harrison and the Stark Armory.

Future Activities/Work Planned At This Site:

- None by the IM Project

Previous Activities/Work Completed At This Site:

- This is a National Guard and Department of Military Affairs project. The IM Project is not involved. The upgrade is funded as a maintenance project at Fort Harrison.
- Tower work is considered a maintenance item for the facility
- LtCol Jeff Fisher is the primary contact for the project
- A Project Manager was assigned, William J. Samuelson, (DMA)
- The tower will be upgraded, the anchor bolts will be reinforced.
- Kevin Bruski and Roger Smith are the technical committee contacts
- LtCol Fisher will notify Roger Smith and Dave Clouse when the work is completed.
- IMPM sent coordinated the information for a request for pricing to Radian Corp. for tower structural analysis quote. Radian sent the quote to MTNG and an engineering review was commissioned.



- Kevin Bruski coordinated having DOT structural engineers review the tower foundation and they provided a design to reinforce the tower anchor bolts to MTNG and the PM
- The PM is developing an Statement of Work and will be putting it to bid mid June.

IM Project Managers For This Site:

- MTNG Project Liaison is Kevin Bruski and Roger Smith and Dave Clouse is assisting as requested.
- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

Fox Creek (Richland County)

Activities/Work Currently In Progress At This Site:

- No work was scheduled or completed during this reporting period.

Issue Currently Affecting This Site:

- Tower structure is unable to take dishes.

Future Activities/Work Planned At This Site:

- Will be having the guy wire tension analyzed and corrected.
- IMPM will be presenting DIR 071 to the Finance Committee on 6/2/08 and the IMPD on 6/3/08.
- Microwave to Makoshika (2011)
- Microwave to Culbertson (2011)
- Trunking (2010)

Previous Activities/Work Completed At This Site:

- NEPA Status: Approved.
- All site agreements are in place.
- Infrastructure (81% 2008)
 - Upgrade Tower
 - Upgrade Shelter (Complete)
 - Generator & Propane Tank (Complete)
 - Electrical Work (Complete)
 - Fencing (Complete)
- IMPM presented the DIR to the IMPD who approved the project to be completed.
- Preliminary reports from the structural analysis of the tower indicate that the tower is structurally unsound. Waiting for the final report to take to the IM Technical Committee for direction.
- The final report on the structural analysis provided by Sabre shows several places where the tower is structurally unsound.
- IM Project Management completed a DIR and presented it to the IM Technical Committee asking for guidance on either repairing the tower or replacing it. The



- IMTC recommended replacing the tower and asked that several options be investigated including erecting a shorter tower and having the microwave hops go to the Audubon site east of Glendive instead of Makoshika.
- DIR 087 – Fox Creek Tower Replace-Repair was presented to the IM Finance Committee for identifying funding for the project. They asked Project Management to take the DIR back to the IM Technical Committee to decide the microwave path. The microwave path is going to determine the height of the tower which makes a huge difference in the cost of the tower
 - DIR 087 – Fox Creek Tower Replace-Repair was returned to the IMTC to make a decision on the path for the microwave. The IMTC reviewed path studies that included using the proposed site east of Glendive to go south and a site call Sioux Pass going North. IMTC would like more information about the Sioux Pass site before making a decision.
 - IM Project Management asked for and received path information from Harris Stratex about the alternate path going from Culbertson, Sioux Pass, Fox Creek, Autovon, Makoshika, and Fallon. This path information was very similar to the path study completed by Bob McWilliams (IMTC Chair) and Roger Smith (MHP).
 - Denny Palmer (Richland County) is researching the Sioux Pass site that is available for sale.
 - The reflectors have been removed from this tower.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Gallatin EOC (Gallatin County)

Activities/Work Currently In Progress At This Site:

- Motorola completed site optimizations for this site.
- IMPM, Frank Smith (Gallatin County), and Roger Smith (MHP) conducted Punchlist Site walk. All infrastructure upgrades have been completed.

Issue Currently Affecting This Site:

- No interoperability frequencies. No estimated date for resolution.

Future Activities/Work Planned At This Site:

- Activate Trunking (2009)

Previous Activities/Work Completed At This Site:

- Microwave to Kenyon St. Water Tank (2008)
- Microwave to High Flat (2008)
- Infrastructure (100% complete)
- Motorola completed the antenna system design for the Gallatin County EOC site.
- IMPM requested the site completion report from Harris Stratex.



- Fencing and grounding has been completed, IMPM working on setting up Punchlist Site Walk.
- IMPM and Roger Smith (MHP) conducted a site visit to validate that the work has been completed. Grounding is still an issue.
- The fencing has been installed, only the fence grounding remains to be completed. This is scheduled to be completed the week of August 18th.
- The fencing is currently being installed by Harris Stratex, the fencing has been rescheduled to be completed installed by August 1st.
- NEPA Status: Approved.
- MDoT provided some milling to be used for landscape covering.
- Generator startup test has been completed.
- Harris Stratex crew cleaned up the site as requested by Facility Manager.
- The trenching at the EOC has been completed.
- The power is connected to the EOC shelter and turned on.
- Trunked radio equipment was cold installed.
- Trunking, 4 trunked channels, 1 interop channel (Summer 2008)
 - Frequencies
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked frequencies license issued.
 - Trunked equipment delivered.
 - Combiner equipment delivered.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Garneill (Fergus County)

Activities/Work Currently In Progress At This Site:

- IM Project Management is working with Air Force, Facility Manager, and CMIC in obtaining Air Force Amended Lease Agreement.

Project Delay - Issue Currently Affecting This Site:

- Air Force Sub-Lease, Bill of Sale, and Right of entry agreements have not been completed and have been forwarded to the Air Force Space Command level. This delay may mean the site will not be constructed this year.

Future Activities/Work Planned At This Site:

- Microwave to S. Moccasin (2009)
- Microwave to Cooney (2009)

Previous Activities/Work Completed At This Site:



- Department of Transportation is responsible for providing the shelter. Shelter rehab is complete and is waiting to be moved to the site.
- Jointly funded by Montana DOT and Air Force. DOT and SI International are responsible for all contracting and project management. Sub-Lease, Right of Entry for Construction, and Real Property transfer to the local agency has not been finished by the Air Force legal and is delaying contracting. Site walks by vendors as part of the bidding process by SI International (AF project) were completed (April 28-29, 2008) Estimated completion of the site can not be determined until legal process is completed
- Agreement with Fergus Electric for buried electrical line
- Vendor site visits as part of AF procurement process
- Site visit by microwave engineer as part of microwave final design
- DOT completed rehabilitation of shelter for the site Fergus Electric engineering and contracting process with SI International for power line work.

Air Force Agreement Status:

- EA (Environmental Assessment) – completed - Dave Hinds, Malmstrom AFB
- Site Use Agreement – in progress - Dave Hinds, Malmstrom AFB
- Site Sub-Lease – in progress - Dave Hinds, Malmstrom AFB
- Economic Analysis – completed - Dave Hinds, Malmstrom AFB
- Bill of Sale – transfer of property to local agency – in progress - Dave Hinds, Malmstrom AFB
- Dept of Air Force right of entry for construction – in progress - Dave Hinds, Malmstrom AFB

NOTE: DOT (Kevin Bruski) and SI International are responsible for infrastructure activities at this site.

Kevin Bruski (MDOT) was appointed by the IMPD to be the point of contact and coordinate with the AF project managers. Dave Clouse is assigned to assist Kevin Bruski as requested.

IM Project Managers For This Site:

IM Project has no infrastructure responsibilities at this site

- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

Gideon (Valley County)

Activities/Work Currently In Progress At This Site:

- Microwave connectivity has been established between this site and the LEC in Helena. Motorola has successfully communicated with the trunked radio equipment from the Master Controller.
- Motorola ordered the combining equipment for the frequency changes and channel expansion for this site.

Issue Currently Affecting This Site:



- Frequencies changed after the delivery of the trunked equipment. Combiner will need re-engineering.
- Decision was made to add an additional trunked channel after the delivery of the trunked equipment. Additional frequencies have not been identified. Combiner will need re-engineering.
- Trunked frequencies search underway. No estimated date for resolution.
- Frequency search and channel expansion will result in combiner modifications.

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 8/26/09.

Previous Activities/Work Completed At This Site:

- Microwave link to Master Control Site scheduled 6/4/08.
- Microwave system testing (2008).
- Microwave to Deadman Butte (2008)
- Dave Clouse (NGC), Roger Smith (MHP), and a representative of Harris Stratex visited this site to inspect the infrastructure and microwave.
- NEPA Status: Approved.
- Infrastructure (100% complete, 2007)
 - Tower
 - Upgrade Shelter
 - Generator.& Propane Tank
 - Electrical Work.
- Microwave to Hinsdale (2007)
- Trunking
 - Frequencies:
 - Some trunked frequencies licenses issued.
 - Interoperability frequencies identified, engineered by Motorola.
 - Trunked equipment delivered, cold installed.
 - Combiner equipment delivered.
 - Antenna system equipment delivered, installed.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Greeno (Yellowstone County)

Activities/Work Currently In Progress At This Site:

- Dynamic Environment is waiting on responses from some of the Tribal Nations so they can complete the Environmental Assessment on this site.

*Issue Currently Affecting This Site:*

- Do not have correct coordinates for this site.

Future Activities/Work Planned At This Site:

- NEPA Status: Not Submitted.
- Infrastructure (0% complete, 2010)
 - Tower
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work.
 - Fence
- Microwave to Shane Ridge (2010)
- Microwave to Phipps Park (2010)
- Microwave to Coburn (2010)
- Trunking (2011)

Previous Activities/Work Completed At This Site:

- IMPM, Jim Kraft (Yellowstone County), and Dale Osborne (MHP) attempted to do an initial site walk on this site. It was raining and so foggy it was impossible to identify anything on that hill.
- Dale Osborne (MHP) and Jim Kraft (Yellowstone County DES) met with the land owner to identify a location for the site. A location was chosen, Dale obtained coordinates and will check coverage and path availability
- IMPM began creating NEPA and Soil Sample Statement of Work documents to go out for bid for this site.
- A contract was signed to complete NEPA work on this site. The contractor is scheduled to conduct site visits the middle of November.
- Also, Sabre was contracted to complete upgrades to this site and will be conducting soil sample work on this site the 2nd week of November. Tower Systems out of South Dakota will be completing the infrastructure upgrades for Sabre and will be reviewing this site on Tuesday 11/5.
- Dynamic Environmental Inc. visited this site to begin the environmental assessment required by the NEPA process.
- GeoScience visited this site to begin the soil survey process. They provided a report based on their study to IM Project Management.
- IM Project Management is gathering the FEMA IB 271 requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.
- IM Project Management is working with local representatives to get correct coordinates for this site.
- Roger Smith (MHP) and Dale Osborne (MHP) visited this site on Tuesday, January 20th to get corrected coordinates. Roger will get the coordinates to the IM Project Management so that they can be forwarded to the company doing the Environmental Assessment study.
- Roger Smith (MHP) is downloading the coordinates taken during his last trip to this site and will pass them on to Project Management.
- IM Project Management received the coordinates for this site from Roger Smith (MHP) and provided them to Dynamic Environmental.



- IM Project Management is changing the Statement of Work for this site into the revised format.
- Jim Kraft, Yellowstone County DES Coordinator, obtained the landlord's signature on the lease agreement for this site. He will be working with the County Commissioners to finalize the lease.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

Greycliff (Sweet Grass County)

Activities/Work Currently In Progress At This Site:

- IM Project Management currently waiting for the Environmental Assessment documents from Dynamic Environmental Assessment engineering firm so that all of the PSIC IJ1 Sites can be submitted to FEMA.
- Infrastructure Statement of Work ready to send to Sabre for PSIC IJ1 Sites requesting price quotes.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- NEPA Status: Not Submitted.
- IMPM to obtain approval from Facility Manager of SOW, site map, and shelter layout.
- Infrastructure (13% complete, 2010)
 - Tower
 - Shelter
 - Generator & Propane Tank
 - Electrical Work
 - Fence
- Microwave to Meyer's Flat (2010)
- Microwave to Shane Ridge (2010)
- Trunking (2011)

Previous Activities/Work Completed At This Site:

- EA study currently under way, report rescheduled to be submitted to IM the first week of April 2009.
- IMPM working on gathering the FEMA IB 271 Requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.
- Soil Study received from Engineering Company
- The engineering company is working on the schedule to conduct site visit for Soil Study.
- IMPM and Sabre sub-contractor conducted site visit on 11/5.
- NEPA Environmental Assessment Compliance study scheduled for 11/5.



- IMPM and Sabre sub-contractor scheduled to conduct site visit on 11/5.
- IMPM created the FEMA NEPA Compliance Statement of Work and sending it to DMA for procurement. The purpose is for gathering information for the IB 271 Requirements.
- IMPM waiting for directions on next steps regarding impact of the FEMA requirement for the IB 271.
- Facility Manager has returned from providing assistance to California. IMPM will work with Facility Manager to complete the SOW, site map, an shelter layout.
- Received approval of the SOD.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Highwood Baldy (Cascade County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Project Delay - Issue Currently Affecting This Site:

- Air Force Sub-Lease, Bill of Sale, and Right of entry agreements have not been completed and have been forwarded to the Air Force Space Command level. This delay may mean the site will not be constructed this year.

Future IM Activities/Work Planned At This Site:

- Trunking (2010)
- Microwave hop to Flying J (2009)
- Microwave hop to S. Moccasin (2009)

Future AIRFORCE Activities/Work Planned At This Site:

- Infrastructure (2009)
 - 150 ft Tower
 - Shelter with internal Generator
 - Propane Tank
 - Power line improvements to the site
 - Fence

Previous Activities/Work Completed At This Site:

- Air Force funded site. SI International is responsible for all contracting and project management. Sub-Lease, Right of Entry for Construction, and Real Property transfer to the local agency has not been finished by the Air Force legal and is delaying contracting. Site walks by vendors as part of the bidding process by SI



International (AF project) were completed (April 28-29, 2008) Estimated completion of the site can not be determined until legal process is completed.

- Vendor site visits as part of AF procurement process
- Geo-Tec analysis for tower foundation
- Site visit by microwave engineer as part of microwave final design
- Fergus Electric engineering and contracting process with SI International for power line work.
- MDoT (Kevin Bruski) has completed the Forest Service site lease process. A lease has been approved.
- National Guard legal office has approved the airlift for the construction phase of the project

Air Force Agreement Status:

- EA (Environmental Assessment) – completed - Dave Hinds, Malmstrom AFB
- Site Use Agreement – in progress - Dave Hinds, Malmstrom AFB
- Site Sub-Lease – in progress - Dave Hinds, Malmstrom AFB
- Economic Analysis – completed - Dave Hinds, Malmstrom AFB
- Bill of Sale – transfer of property to local agency – in progress - Dave Hinds, Malmstrom AFB
- Right of construction – in progress - Dave Hinds, Malmstrom AFB
- Forest Service Site Permit – in progress – Kevin Bruski

NOTE: SI International is responsible for construction activities at this site.

Kevin Bruski (MDoT) was appointed by the IMPD to be the point of contact and coordinate with the AF project managers. Dave Clouse is assigned to assist Kevin Bruski as requested.

IM Project Managers For This Site:

IM Project has no infrastructure or microwave responsibilities at this site

- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

High Flat (Gallatin County)

Activities/Work Currently In Progress At This Site:

- The NEPA Statement of Work for the microwave and trunking installation is currently ready to be sent to FEMA for their review.

Issue Currently Affecting This Site:

- There's a microwave issue at High Flat that is preventing bringing the site into wide area trunking.
- Frequencies:
 - No interoperability frequencies. No estimated date for resolution.

Future Activities/Work Planned At This Site:

- Microwave hop to Nixon Ridge (2010)
- Microwave to Timberline (2010)
- Trunking (2009)



- Antenna system order pending design completion.

Previous Activities/Work Completed At This Site:

- Microwave hop to Gallatin EOC (2009)
- Microwave to Law & Justice Center (2009)
- Infrastructure (100% complete, 2008)
- Sporadic issues with the microwave is affecting the Motorola wide area trunking for testing purposes.
- Generator startup test completed.
- Current infrastructure work is completed. Generator start-up tests are schedule to be completed 10/15/2008.
- The IMPM conducted punchlist site walk with representatives of the IMTC. The fencing and grounding is completed. The generator has been installed. IMPM is currently trying to validate if the larger vents and louvers have been installed, and is documenting the results of the site walks.
- Motorola has completed the antenna system installation.
- Site upgrades completed, IMPM to schedule Punchlist Site Walk.
- Sabre withdrew the Change Order for generator door and vents.
- IMPM working with Sabre to reschedule the infrastructure upgrades.
- Trunked radio antenna equipment has been ordered.
- DIR 080 - High Flat – Additional Infrastructure Upgrades – was created and submitted to IMTC, IMFC, and IMPD. It was decided by the IMFC to table the DIR until this can be discussed with Sabre.
- NEPA Status: Approved.
- Sabre visited the site and found that the door is too narrow to get the generator through. They also found that the exhaust fan, louvers and exhaust thimble are too small for the larger generators which produce more heat inside the generator room. IMPM has received a change order from Sabre for this work and is currently working on a DIR, which will be presented to the Finance Subcommittee at their 7/14/08 meeting. This will impact the schedule by 2-4 weeks.
- Motorola completed antenna design.
- Trunked radio equipment was cold installed.
- Generator delivered 4/14/08.
- Trunking (4 trunked channels, 1 interop channel)
- Microwave contract signed 4/25/08.
- Trunking (2008)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked frequencies license issued.
 - Trunked equipment delivered to EOC.
 - Combiner equipment delivered to EOC.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com



- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Hill County Sheriff's Office (Hill County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- None for infrastructure

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 5/1/09.
- Install TrESAP (2009)

Previous Activities/Work Completed At This Site:

- Microwave system testing (2008)
- Microwave link to Master Control Site.
- Microwave installation slippages have delayed trunked radio testing at this site since May, 2008.
- See the microwave section for details of the frequency issues between Santa Rita and Mt. Royal.
- Roger Smith (MHP), Dave Clouse (IMPM), and a representative of Harris Stratex completed a site visit to inspect the microwave and infrastructure at this site.
- Motorola brought this site into wide area trunking for NTIP testing.
- Motorola conducted BER testing on the microwave to the HCSO site from the Master Controller. The microwave failed the testing. Test results were shared with Harris Stratex technicians, who are working to resolve the problem.
- NEPA Status: Approved.
- Contract was signed between Hill County and Motorola for the purchase of the dispatch console equipment.
- Trunking (4 trunked channels, 1 interop channel)
- Infrastructure (2007)
 - Tower
 - Shelter upgrades
 - Fence
- Microwave to WAPA Chinook (2007)
- Microwave to Mt. Royal (2007)
- Trunking (2007)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked frequencies license issued.
 - Trunked equipment delivered, cold installed.
 - Combiner equipment delivered, cold installed.
 - Antenna system delivered, cold installed.
 - Optimization complete.



- This site was included in Motorola Change Order 006 which was approved by the IMPD Executive Board for combiner rework and channel expansion.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Mark Adams, (406) 443-8676, Mark.E.Adams@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Hinsdale (Valley County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- None

Previous Activities/Work Completed At This Site:

- Microwave system testing (2009)
- Inside vent covers for the Bard units were not installed.
- NEPA Status: Approved.
- Infrastructure (100% complete, 2007)
 - Tower
 - Shelter Upgrades
 - Generator.& Propane Tank
 - Electrical Work.
- Microwave hop to Gideon (2007)
- Microwave hop to Saco (2007)
- Roger Smith (MHP), Dave Clouse (IMPM), and a representative of Harris Stratex completed a site visit to inspect the microwave and infrastructure at this site.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

Hysham Hills (Treasure County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

*Issue Currently Affecting This Site:*

- None

Future Activities/Work Planned At This Site:

- NEPA Status: Not Submitted.
- Infrastructure (2010)
 - Tower
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work.
 - Fence
- Microwave hop to Pompey's Pillar (2011)
- Microwave hop to N. Forsyth (2011)
- IMPM will be working with the Treasure County Commissioners to identify a site and begin the paperwork.

Previous Activities/Work Completed At This Site:

- A county commissioner from Treasure County is researching some locations for this site. AT&T used to have a site in the Hysham Hills that was a microwave hop between Pompey's Pillar and the North Forsyth sites. The tower and building were removed years ago and all that's left is the concrete slab. This could be a good location because of and existing known path exists. The landowner is unknown.
- The IM project has signed a contract with a company to complete the NEPA studies on several sites in Montana including Divide. The company plans to be in Montana the middle of November to review the sites.
- Roger Smith (MHP), Dale Osborne (MHP), Mack Cole (Treasure County Commissioner), and IM Project Management visited the Hysham Hills area on Wednesday, October 22nd to identify a location for the new site. Prospective sites were noted and will be researched.
- Mack Cole (Treasure County Commissioner) sent a letter to the owners of the old AT&T site in the Hysham Hills asking if they are interested in selling the site. He has not heard back at this time.
- Mack Cole (Treasure County Commissioner) reported to IM Project Management that he was able to contact the owner of the AT&T site in the Hysham Hills. The owner is interested in selling the site and is providing a key so that a site walk can be completed.
- IM Project Management updated Big Sky 11 members along with other interested individuals and will schedule a site visit for early January.
- Mack Cole (Treasure County Commissioner) received the key for this site. A site visit has been tentatively scheduled for the third week of January.
- Roger Smith (MHP), Mack Cole (Treasure County), and IM Project Management completed a site walk survey on this site on January 20th, gathering data such as correct coordinates, condition of building and tower, and the grounds.
- Roger Smith (MHP) is downloading the coordinates taken during his last trip to this site and will pass them on to Project Management.
- Mack Cole, even though he is no longer commissioner of Treasure County, has continued to work with the owner of this site to see if they can come to an agreement



on the project purchasing it. He is also working with the landowner that surrounds the site to get an agreement or easement across their land.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Jette Point (Confederated Salish & Kootenai Tribes)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 6/1/09.

Previous Activities/Work Completed At This Site:

- Microwave system testing (2009)
- Microwave installation slippages have delayed trunked radio testing at this site.
- There is an interference problem with the antenna system as currently installed. Motorola is working with their subcontractors to resolve the interference.
- Motorola brought this site into wide area trunking for NTIP testing.
- An infrastructure walkthrough was held at Jette on 8/20/08. The following issues were found:
 - The shelter was scraped up on delivery and has not been fixed.
 - The deadbolt strike plate must be replaced.
- Motorola has completed the optimization of the approved channels.
- NEPA Status: Approved.
- Antenna systems were installed by Motorola.
- Infrastructure (100% complete, 2007)
 - Tower
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work.
 - Fence
- Microwave hop to Blacktail (2007)
- Microwave hop to Pat's Knob (2007)
- Trunking (4 trunked channels, 1 interop channel, 2007)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.



- Trunked frequencies license issued.
- Interoperability frequencies identified, engineered by Motorola.
- Trunked equipment installed.
- Combiner equipment installed.
- Antenna system installed.
- This site was included in Motorola Change Order 006 which was approved by the IMPD Executive Board for combiner rework and channel expansion.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Mark Adams, (406) 443-8676, Mark.E.Adams@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Judith Peak (Fergus County)

Activities/Work Currently In Progress At This Site:

- IMPM working with Air Force, Facility Manager, and CMIC in obtaining Air Force Amended Lease Agreement.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Trunking (2010)

Previous Activities/Work Completed At This Site:

- Microwave hop to S. Moccasin (July 2008) MTNG funded
- Microwave hop to Antoine Butte (July 2008) MTNG funded
- DIR089 was prepared and submitted for approval for the non-trunked combiner system for the site. An award letter is being drafted for Fergus County.
- Infrastructure (100% complete, 2007)
 - Tower
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work.
 - Fence

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com



Kalispell Water Tower (Flathead County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- Trunked frequencies licensing underway. No estimated date for resolution.

Future Activities/Work Planned At This Site:

- Trunked equipment to be optimized by Motorola.
- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 6/1/09.

Previous Activities/Work Completed At This Site:

- Microwave installation slippages have delayed trunked radio testing at this site.
- Site walk conducted by Roger Smith found several grounding items that need to be corrected. IM Project Management will work with local contacts to get the grounding corrected.
- Motorola brought this site into wide area trunking for NTIP testing.
- NEPA Status: Approved.
- Motorola has completed the optimization of the approved channels. Antenna systems were installed by Motorola.
- Antenna placement approved by the City of Kalispell.
- Infrastructure (100% complete, 2007)
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work.
- Microwave installed (2007)
- Trunking (2007-2008)
 - Frequencies:
 - Some trunked frequency licenses issued.
 - Interoperability frequencies identified, engineered by Motorola.
 - Trunked equipment delivered, cold installed.
 - Combiner equipment delivered.
 - Antenna system equipment delivered.
- This site was included in Motorola Change Order 006 which was approved by the IMPD Executive Board for combiner rework and channel expansion.
- An infrastructure walkthrough was held at the Water Tower on 8/20/08. The generator had a Low Coolant alarm and could not be tested. After modifying the low coolant sensor, the vendor was not able to test the generator because the propane tank was empty. The county has been notified that the generator cannot be tested and signed off until the tank is filled.
- IM Project Management worked with representatives from Flathead County to get the propane tank filled so the generator testing could be completed.
- Roger Smith (MHP), Dave Clouse (IMPM), and a representative of Harris Stratex completed a site visit to inspect the microwave and infrastructure at this site.

*IM Project Managers For This Site:*

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Kenyon Water Tank (City of Bozeman)*Activities/Work Currently In Progress At This Site:*

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- No interoperability frequencies. No estimated date for resolution.

Future Activities/Work Planned At This Site:

- Trunking (2009)
 - Frequencies:
 - Remainder of trunked frequencies license issued.
 - Antenna system order pending.
- Activate trunking (2008)

Previous Activities/Work Completed At This Site:

- Infrastructure (100% complete)
- Motorola completed site optimizations for this site.
- Motorola completed the antenna system design for the Kenyon Drive Water Tank site.
- Current infrastructure work is completed. Generator start-up tests are schedule to be completed 10/15/2008.
- The IMPM conducted punchlist site walk with representatives of the IMTC. The generator, conduit installation, and grounding work is completed. IMPM is documenting the results of the site walk.
- An issue was presented and resolved regarding finishing up the conduit exit/entry points so that they are sealed.
- The exhaust extension work has been completed.
- Harris Stratex has begun the process of installing ice bridges to cover the cables running from the tower to the shelter through the new conduit. The conduit could not be put as close to the shelter as was necessary, so the cables need to be covered as they enter the conduit from the tower and enter the shelter.
- All infrastructure work has been completed.
- IMPM will schedule Punchlist Site Walkthrough.
- NEPA Status: Approved.
- The generator was installed June 24th and the initial startup test performed. The Bozeman City inspector found that the Automatic Transfer Switch was not installed correctly and the Harris Stratex crew will return to fix the problem.



- All of the conduit and trenching has been completed.
- Trunked radio equipment was cold installed.
- An additional site walk was conducted 4/21/08 to determine final floor plan for the equipment shelter.
- Microwave contract signed 4/25/08.
- Trunking (2007-2008)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.
 - Some trunked frequencies license issued.
 - Trunked equipment delivered.
 - Combiner equipment delivered.
 - Antenna system order pending.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

King Mountain (Lincoln County)

Activities/Work Currently In Progress At This Site:

- The electrician that has been working on this site had planned to complete the work by having Roger Smith take (Interoperability Montana) him to the top of the mountain with the IM's Snowcat as soon as they finished the Blue Mountain Site but they never were able to get to the Blue Mountain site so they weren't able to complete the work at either site.

Issue Currently Affecting This Site:

- Site infrastructure is to be upgraded to meet the needs of the IM. This work includes:
 - The power supply – 100 amps, need 200.
 - Cooling – An additional “window” AC unit and exhaust fan.
- Trunked frequencies search underway. No estimated date for resolution.

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 6/1/09.

Previous Activities/Work Completed At This Site:

- The electrician has completed most of the work on this site. The power company hasn't connected the upgraded power to the building so he was not able to hook into the transfer switch.
- Roger Guches (Lincoln County Sheriff's Office), contacted the power company and made arrangements for payment of the deposit so they will move forward on this one.



- Roger is also scheduling a trip to the site to complete an inspection and either approve or deny partial payment.
- When checking the status of the power company's upgrade to King Mountain, Preferred Electric discovered that the power company had not received the paperwork from the Flathead County Commissioners so had not upgraded the power. IM Project Management contacted Roger Guches, Lincoln County IM representative to let him know about the hold up. Roger contacted the Commissioners, who immediately provided the paperwork to the power company. The power company completed their work the week of Thanksgiving. That weekend a storm moved through Lincoln County prohibiting Preferred Electric from accessing the site to complete their work.
- Arrangements were made with BNSF to transport the electrician to the site but when Motorola was contacted about finishing up the trunking upgrade IM Project Management was told Motorola needed to climb the tower to hang antennas and the coating of ice from recent storms precluded them climbing the tower. Since Motorola was not going to be able to complete their work there was no reason to push the electrical work through. The electrical will be completed when the weather breaks allowing access to both the site and the tower.
- The IM Project purchased a snow machine to assist in reaching radio sites in the winter time. IM Project Management is working with IM leaders to schedule a time when the snow machine can be used to transport the electrician to this site to complete their work. BNSF is scheduling the following work (planned for completion by end of July 2008):
 - Tower extension
 - Grounding halo
 - Ice bridge
 - Generator installation
- Infrastructure upgraded (2008):
- Electrical supply upgraded to 200 amps.
- 200 amp distribution panel
- Second propane tank
- Microwave circuits are scheduled to be extended from King to Big Mountain by 10/22 depending upon availability of rack space at Big Mountain.
- Motorola is assigning a team to complete antenna installation at King prior to 10/31.
- Motorola completed the site design.
- Trunked system design is underway.
- DIR 063 was approved and state funding identified to pay for it.
- Lincoln County was notified that the procurement for this site can proceed.
- The IM Technical Committee's Executive Committee provided Project Management with specification for the vent fan for this site. This information was passed on to the BNSF representative so he could obtain cost estimates. The cost estimates were received the same day so the DIR could be sent to the Finance Committee.
- Floor plan for equipment layout was approved by Motorola.
- NEPA Status: Not Submitted. Not believed to be necessary for IM work.
- Trunking (2007-2008)
 - Frequencies:
 - Some trunked frequencies licenses issued.



- Interoperability frequencies identified.
- Trunked equipment delivered to staging
- Combiner equipment delivered to staging.
- IMTC approved the DIR for upgrades to this site with a few modifications. The 45 KW generator provided by BNSF as originally requested will be used to backup the entire site. IMPM is working with locals to get estimates for the electrical upgrade work to be done so it can be taken to the Finance Committee for approval.
- Air conditioners and vent fan – will be starting on it the week of 8/25/08. Anticipate that it will take 2 to 2 ½ days per site. 16" Dayton fan. Electrician will be installing the thermostat to control the fan. Kevin Fitzpatrick (BNSF) went to the sites and used a marker to draw where the fan and the A/C are to go.
- Tower sections due in any day. BNSF will be putting out a schedule for installation of the tower sections.
- Going to have to pull the outside rack BNSF will remove it but leave it in the building so that Lincoln County can put it where they want it. There is space for five racks.
- Transfer panels have been ordered. They thought they were in stock so should be here in 2 weeks. If not in stock it could take 6 weeks to get them. Kevin will get a drawing for the electrician.
- Grounding – there is a ground system around the building and BNSF will send a diagram to the electrician so he can tie into the ground system. BNSF will put a ground bus in the IM side of the building. There is no halo in the IM side of the building.
- Training – The electrician has completed the training just has to submit it.
- Surge protection – Kevin says there will be no built-in surge protection. This was brought up primarily with respect to the trunking equipment, but further consultation with Motorola confirmed that the trunking equipment runs off batteries, providing its own surge protection.
- IMPM to confirm the rack layout with Motorola.
- Wave guide bridges are in. Executive Director of the Forest service will be out reviewing the sites next week.
- A shelter layout diagram has been produced and is in the process of approval and modification for new equipment.
- BNSF is prepping for generator installs and scheduling builders to install AC and exhaust fans.
- Tower extension, air conditioner, and vent fan is installed.
- Electrical Contractor is scheduled to begin work on the sites.
- BNSF representative is working with the electrician on the layout of the site.
- The electrician is scheduled to begin work on the Lincoln County Sites the first week of October. The transfer panels are not scheduled to arrive until the middle of October, so the Electrician will return to the site to connect the transfer panels after they arrive.
- The electrician requested information on how the vent fan and air conditioners should be set up. Bob McWilliams (IMTC Chair) instructed the exhaust fans should be set as primary, heat below 55, exhaust fan from 68 to 80 and air conditioning above 80.
- Electrical work is underway, scheduled to be completed the week of 10/20, but potentially as early as the week of 10/13 depending upon availability of utility crews.



- BNSF provided transfer switches for each King, Blue, and Pinkham so that the electrical work could be completed in one trip to each site. This will expedite the completion of these sites, scheduled the week of 11/3.
- The IM Technical Committee decided the electrical work on this site needed to be completed as soon as possible. IM Project Management created a DIR for the additional cost to access the mountain during the winter but is still waiting for BNSF to get a price.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Mark Adams, (406) 443-8676, Mark.E.Adams@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

KONA (Beaverhead County)

Activities/Work Currently In Progress At This Site:

- IM Project Management received a CD containing the AMEC Environmental Assessment document. Currently waiting for the remaining Environmental Assessment documents from Dynamic Environmental Assessment engineering firm so that all of the PSIC IJ2 and IJ1 Sites can be submitted to FEMA.
- IM Project Management is preparing to send out to Sabre the Infrastructure SOWs for the PSIC IJ2 Sites requesting price quotes.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Infrastructure (14% complete, 2010):
 - Tower
 - Shelter
 - Generator & Propane Tank
 - Electrical Work
 - Fence
- Microwave to Ellis Beaverhead (2010)
- Microwave to Antelope Peak (2010)

Previous Activities/Work Completed At This Site:

- IMPM received the Environmental Assessment report from AMEC on February 18. Currently waiting for the electronic version so that we can send it in to FEMA for review and approval.
- IMPM packaged up the Statement of Work with the other PSIC IJ2 sites to be sent to Sabre for pricing.
- IMPM working on gathering the FEMA IB 271 Requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.



- Received Soil Study report.
- IMPM provided copies of Statement of Work to IMTC Chair and IM Executive Director for review.
- Soil Study scheduled to be conducted on 11/3.
- IMPM, Facility Manager (Bob McWilliams) and Sabre sub-contractor conducted site visit on 10/27.
- EA study currently under way.
- NEPA Status: Rejected.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

Lost Creek (Deer Lodge County)

Activities/Work Currently In Progress At This Site:

- IM Project Management currently waiting for the Environmental Assessment documents from Dynamic Environmental Assessment engineering firm so that all of the PSIC IJ1 Sites can be submitted to FEMA.
- Infrastructure Statement of Work ready to send to Sabre for PSIC IJ1 Sites requesting price quotes.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- NEPA Status: Not Submitted.
- IMPM expects formal approval for site access
- IMPM to obtain facility Manager approval of Site Map, and Shelter layout
- Infrastructure (16% complete, 2010)
 - New Shelter
 - Generator.& Propane Tank
 - Electrical Work.
 - R56 grounding for entire site
 - New 60' self supporting tower
- Microwave hop to Mac Pass (2010)
- Microwave hop to XL Heights (2010)
- Microwave hop to Grassy Deer Lodge (2013)
- Microwave hop to Anaconda Law & Justice Center (2013)
- Trunking (2010)

Previous Activities/Work Completed At This Site:

- EA study currently under way, report rescheduled to be submitted to IM the first week of April 2009.



- IMPM working on gathering the FEMA IB 271 Requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.
- IMPM provided copies of Statement of Work to IMTC Chair and IM Executive Director for review.
- IMPM discussed the proposed upgrades with MT FWP Wildlife Area Manager. No issues were identified at this time.
- Soil Study is pending, as we are trying to locate the prior soil report for the existing tower. This may need to be scheduled if the report cannot be located.
- IMPM and Sabre sub-contractor conducted site visit on 10/22.
- EA study currently scheduled to be conducted on 11/7.
- The tower study determined that the existing tower cannot be upgraded to the required height for antenna placement. IMTC is currently working with Harris/Stratex to evaluate whether smaller dishes and antenna placement can be used.
- The work for the tower study has been approved.
- Work at this site is on hold pending a Purchase Order Number or check/credit card so that the tower structural analysis can proceed.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

MacDonald Pass (Lewis & Clark County)

Activities/Work Currently In Progress At This Site:

- The NEPA Statement of Work for the microwave and trunking installation is currently ready to be sent to FEMA for their review.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- None

Previous Activities/Work Completed At This Site:

- This site is to be upgraded to provide a parallel microwave path to the Helena Armory (2008).
- Infrastructure (100% complete, 2008)
- Generator (2008)
- All work at the site has been completed.
- Kevin Bruski (MDOT) has approved all infrastructure upgrades.
- DIR 079 - Antenna Cables - was approved. All work at the site has been completed.
- NEPA Status: Approved.



- Sabre has installed the additional 50' tower section and moved the light to the top. IMPM and Kevin Bruski (MDOT and Facility Manager) visited the site and found that the coax cable that Sabre had purchased was too small and that 7/8" coax cable is required. Sabre has provided IMPM with a Change Order for the correct size coax cable.
- This site has been functioning as a trunked site for Lewis & Clark County since 2005 or before.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Primary: Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

Makoshika (Dawson County)

Activities/Work Currently In Progress At This Site:

- IM Project Management is working on NEPA documents to prepare the site for receiving microwave and trunking equipment.

Issue Currently Affecting This Site:

- Tower failed the structural analysis with the currently planned load.

Future Activities/Work Planned At This Site:

- Infrastructure (64%, 2010)
 - Tower Upgrades
 - Generator (100% Complete)
 - Building Upgrades (100% complete).
- Microwave hop to Fox Creek (2011)
- Microwave hop to Fallon (2011)
- Makoshika to Autovon (2010)
- Trunking (2010)
- Will be having the guy wire tension analyzed and corrected.

Previous Activities/Work Completed At This Site:

- NEPA Status: Approved.
- The construction upgrades to the shelter have been completed.
- IMPM received approval of DIR 072 for guy wire tension correction.
- TW Enterprises arrived Wednesday, 7/16 to complete the generator hookup, startup, and testing at this site. They discovered the propane tank was leaking from a seam in the tank. Harvest States was called to come empty the tank, Sabre was contacted and they promised to have the tank swapped out and refilled.
- Sabre also discovered that the tower needs a dish at 140 feet but the tower is only 130 feet tall. IM Project Management is checking with Harris Stratex Networks to see if the dish can be lowered.
- Roger Smith, IM Project Management, the facility manager, and the consortium technical representative conducted a site walk through to complete the infrastructure



signoff checklist on Tuesday, July 29th. A few questions were noted for the contractor.

- Site punch list was completed by the IMPM and discussed with Contractor.
- Sabre completed the tower study. The tower was found to be not structurally sound enough for the loading required. IMPM will be creating a DIR to take to the IMTC to obtain a decision on what to do about the tower. If the path is changed to go to the site east of Glendive instead of Fox Creek then the tower may be ok.
- Contractor has scheduled the week of the 15th to finalize the items on the punch list.
- Sabre was at the site on 9/17 to complete the punch list items. IM Project Management is scheduling a site visit with Dale Osborne (MHP) to verify the work.
- IM Project Management presented DIR 097 – Makoshika Tower Repair to the IM Technical Committee on Sept 22nd. The IMTC is conducting further research into the path options.
- IM Project Management, Dale Osborne (MHP), and Chief Alan Michaels (facility manager) conducted a walkthrough on Wednesday, October 1, 2008. Dale checked the grounding to ensure all the corrections were completed. Dale found some readings that were high and other places produced no reading at all. Also, the ground bus bar that was suppose to be installed at the 100 foot level could not be located. All other punchlist items were completed satisfactorily.
- After consulting with Roger Smith (MHP), IM Project Management completed a new punchlist of items that needed to be corrected at this site. The punchlist was sent to Sabre. Sabre responded with a clarification on why the OLM readings were not showing correctly. IM technical people are reviewing the references provided by Sabre and will make a decision based on the results of their research.
- Sabre also reported that the ground bus bar that was to be placed at the 100 foot level on the tower was missed so they will correct that.
- A determination was made by the IMTC on the grounding that the places that showed high readings needed to be corrected which in this case is the outside ground bus bar.
- Sabre subcontractor, SlaterCom, was scheduled to repair the grounding at this site on December 15th but a winter storm that passed through the state dropped the temperatures to well below zero and precluded them from doing the work. The work will be done when the weather allows.
- Roger Smith (MHP) and IM Project Management visited this site on January 21st to check the status of the Bard HVAC units. While at the site it was noted the coolant temperature alarm was sounding. Roger checked the generator and started it to make sure it was working ok.
- IM Project Management is working with SlaterCom (Sabre subcontractor) to schedule their return to this site so they can complete all the punchlist items that are outstanding. They plan to complete these items the week of February 9th.
- SlaterCom visited this site on 2/9/09 and installed the ground bus bar at the 100 foot level on the tower. They determined that the rest of the grounding was working correctly.
- IM Project Management, Roger Smith (MHP), and Dale Osborne (MHP) completed a site visit on 2/17/09 and Roger gave his final approval of the site.
- IM Project Management gave the approval for the final bill to be paid on this site.

IM Project Managers For This Site:



- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Primary: Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Mauer (Beaverhead County)*Activities/Work Currently In Progress At This Site:*

- IM Project Management is prepared to send the NEPA to FEMA, as soon as we hear from FEMA that the format and content that was sent for the Beaverhead EOC is acceptable.
- IM Project Management to send out to Sabre the Infrastructure SOWs for the PSIC IJ2 Sites requesting price quotes.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Infrastructure (13% complete, 2010)
 - Tower
 - Shelter
 - Generator & Propane Tank
- Microwave hop to Beaverhead EOC (2010)
- Microwave hop to Ellis Peak (2010)

Previous Activities/Work Completed At This Site:

- No word from FEMA on whether the CER report is acceptable for Environmental Assessment approval.
- IMPM has started work on developing the NEPA Statement of Work to be sent to FEMA along with the CER received from BLM.
- IMPM working on gathering the FEMA IB 271 Requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.
- Received Soil Study from Engineering firm.
- The engineering company conducted site visit for Soil Study the week of 11/3.
- IMPM waiting for NEPA approval.
- Soil Study scheduled to be conducted on 11/3.
- IMPM, Facility Manager (Bob McWilliams) and Sabre sub-contractor conducted site visit on 10/27.
- IMPM waiting for BLM approval.
- IMPM completed the NEPA Study Statement of Work documents and sent them to PSSB for procurement.
- Sow for Soil Analysis developed, IMPM working with PSSB to package for procurement.
- IMPM waiting for directions on next steps regarding impact of the FEMA requirement for the IB 271.



- NEPA Status: Rejected.
- IMPM received notification from FEMA via Sheri Lanz (DES) that IM needs to provide additional NEPA information as described in IB 271.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

Montana Department of Transportation (Lewis & Clark County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- None

Previous Activities/Work Completed At This Site:

- This site has been functioning as a microwave pass-thru site for Lewis & Clark County since 2005 or before.

Miller Peak (Missoula County)

Activities/Work Currently In Progress At This Site:

- Motorola completed and delivered the High Level Carrier report for this site.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- None

Previous Activities/Work Completed At This Site:

- Punchlist items corrected, IMPM working with Harris Stratex to validate.
- IMPM and Roger Smith (MHP) conducted a site visit on 8/20/2008). All infrastructure work completed.
- NEPA Status: Approved.
- Shelter upgrades (100% complete, 2007)
- Microwave hop to Pat's Knob (2007)
- Microwave hop to Cominco (2007)

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com



- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Mount Royal (Liberty County)

Activities/Work Currently In Progress At This Site:

- None

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 5/1/09.
- Channel expansion for trunking (2010)

Previous Activities/Work Completed At This Site:

- Microwave link to Master Control Site (2009).
- Microwave system testing (2009)
- The final infrastructure walkthrough for this site is still to be held. It is not yet scheduled.
- Frequencies changed after the delivery of the trunked equipment. Combiner will need re-engineering.
- Decision was made to add an additional trunked channel after the delivery of the trunked equipment. Additional frequencies have not been identified. Combiner will need re-engineering.
- Motorola identified the problem that appeared to be with Mt. Royal. The problem originated from the test equipment rather than the site. It's been corrected and CATP can resume pending access to the test tiles in the region.
- Roger Smith (MHP), Dave Clouse (IMPM), and a representative of Harris Stratex completed a site visit to inspect the microwave and infrastructure at this site.
- Motorola brought this site into wide area trunking for NTIP testing.
- Motorola has begun the combiner re-work for Divide.
- Motorola is scheduled to complete optimizations the last week in September.
- Frequency issues between this site and Santa Rita are being worked on by Harris Stratex.
- Generator issues were resolved.
- Winter damage to dishes has been repaired.
- NEPA Status: Approved.
- Infrastructure (100% complete, 2007):
 - Tower
 - Shelter (provided by MDoT)
 - Generator & Propane Tank
 - Electrical Work.
- Microwave hop to HCSO (2007).



- Microwave hop to Santa Rita (2007).
- Trunking (4 trunked channels, 1 interop channel, 2007)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked frequencies license issued.
 - Interoperability frequencies identified.
 - Trunked equipment delivered, cold installed.
 - Combiner equipment delivered, cold installed.
 - Antenna system delivered, cold installed.
 - Optimization complete.
- This site was included in Motorola Change Order 006 which was approved by the IMPD Executive Board for combiner rework and channel expansion.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Meyers Flat (Park County)

Activities/Work Currently In Progress At This Site:

- **IMPM working on scheduling Punch List Site walk.**

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Infrastructure (95% complete, **2009**)
- **Trunking (2012)**

Previous Activities/Work Completed At This Site:

- IMPM created the NEPA Statement of Work for FEMA, to meet the FEMA IB 271 Requirements for the trunking and microwave upgrades.
- IMPM and Mark Adams worked with Facility Manager, Park County Technician, and Jeff Tong (Bridger Communications) on the tower antenna placement.
- All infrastructure upgrades have been completed. Generator startup test completed.
- The tower has been erected, the shelter and generator installed, and the fence installed. The power company has completed the electrical installation. Only remaining work is the generator startup test and site walk. this is scheduled to be completed by November 21, then the generator startup test can be conducted.
- The shelter and generator was delivered and installed at the site on 10/3, the tower was erected on 11/1. The propane tank concrete pad has been poured and the tank has been delivered. The fencing has been ordered. The electrical permit has been



acquired, with electrical hookup to start on 11/1. Construction is scheduled to be completed by 11/8.

- The tower foundation was poured on 10/8/2008. It took 140 yards of concrete. The tower is scheduled to be erected on 10/15/2008. The tower has been delivered to the site.
- Sabre was awarded the site upgrade SOW. Currently waiting for all contracts to be signed so that the Infrastructure work can begin.
- Park County has sent the Statement of Work out for bid quotes.
- Park County has agreed to do the Local procurement for the site infrastructure.
- NEPA Status: Approved.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

North Forsyth (Rosebud County)

Activities/Work Currently In Progress At This Site:

- Still waiting for HVAC Units to be fixed.
- IM Project Management is working on NEPA documents to prepare the site for receiving microwave and trunking equipment.

Issue Currently Affecting This Site:

- HVAC Units not working correctly.

Future Activities/Work Planned At This Site:

- Infrastructure (75%)
 - Tower Upgrades
 - Shelter Upgrades
 - Generator.& Propane Tank
 - Electrical Work
- Microwave hop to Government Hill (2011)
- Microwave hop to Hysham Hills (2011)
- Trunking (2011)

Previous Activities/Work Completed At This Site:

- NEPA Status: Approved.
- All site agreements are in place.
- IM Project Management contacted Sabre to let them know that the walkthrough was done and items were noted that had not been completed. Sabre is making arrangement to complete the tasks.



- Doug Martins (Facility Manager) met TW Enterprises at the site to complete the generator hookup, startup, and testing process. This process was completed with satisfactory results.
- Sabre is scheduling the contractor to complete the items in question.
- Contractor has scheduled the week of the 15th to finalized the items on the punch list.
- Sabre was at the site on 9/16 to complete the punch list items. IM Project Management is scheduling a site visit with Dale Osborne (MHP) to verify the work.
- IM Project Management, Dale Osborne (MHP), and Doug Martins (facility manager) conducted a walkthrough on Wednesday, October 1, 2008. Dale checked the grounding to ensure all the corrections were completed. Dale found some readings that were high and other places produced no reading at all.
- After consulting with Roger Smith (MHP), IM Project Management completed a new punchlist of items that needed to be corrected at this site. The punchlist was sent to Sabre. Sabre responded with a clarification on why the OLM readings were not showing correctly. IM technical people are reviewing the references provided by Sabre and will make a decision based on the results of their research.
- Sabre questioned the punchlist item about the generator not being grounded correctly at this site so IM Project Management stopped by the site on Wed. October 22nd , took pictures showing all angles of the generator, and forwarded those pictures to Sabre to show the generator was not grounded correctly.
- A determination was made by the IMTC on the grounding that the places that showed high readings needed to be corrected which in this case is the northwest tower leg. Sabre will also be back to ground the generator.
- Sabre subcontractor, SlaterCom, was scheduled to repair the grounding at this site on December 17th but a winter storm that passed through the state dropped the temperatures to well below zero and precluded them from doing the work. The work will be done when the weather allows.
- Roger Smith (MHP), IM Project Management, and Doug Martens (Rosebud County) conducted a site inspection to check the grounding issues identified during the previous inspection. SlaterCom, subcontractor for Sabre, corrected the problems and they both tested fine.
- An issue was noted with the Bard HVAC units. Roger checked all the settings but was unable to get them to heat. IM Project Management will contact Bard to get a representative to correct the problem.
- IM Project Management contacted Sabre to let them know there was a problem with the HVAC units. These units are still under warranty so Sabre contacted the company they purchased them through, Cellxion which is a sister company to Sabre, to make arrangements to get the units fixed under warranty.
- IM Project Management approved paying the 10% holdback on the Sabre bill since the punch list items were corrected.
- SlaterCom stopped at this site on their way back from Glendive to check the HVAC problem. They decided the thermostats were not working correctly. They are heating and cooling at the same time. SlaterCom is contacting BARD to determine how they want to proceed with this issue.
- IM Project Management will continue to work with Sabre to ensure the HVAC problem at this site is corrected.
- Final payment for this site was approved by IM Project Management.

*IM Project Managers For This Site:*

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Nixon Ridge (Gallatin County)*Activities/Work Currently In Progress At This Site:*

- The NEPA Statement of Work for the microwave and trunking installation is currently ready to be sent to FEMA for their review.
- IMPM, Frank Smith (Facility Manager), and Roger Smith (Interoperability Montana) conducted a Punchlist Site walk. All infrastructure upgrades have been completed.

Issue Currently Affecting This Site:

- Sporadic issues with the microwave is affecting the Motorola wide area trunking for testing purposes.
- Frequencies:
 - No interoperability frequencies. No estimated date for resolution.

Future Activities/Work Planned At This Site:

- Infrastructure (100% complete, 2009)
 - Shelter Upgrades
 - Generator.& Propane Tank
 - Electrical Work
- Microwave hop to Bull Mt. (2010)
- Microwave hop to High Flat (2010)
- Microwave to Limestone (2011)
- Frequencies:
 - Interoperability frequencies determined. No estimated date for resolution.

Previous Activities/Work Completed At This Site:

- Trunking, 4 trunked channels, 1 interop channel (2009)
- Remainder of trunked frequencies licenses issued.
- Antenna system order pending design completion.
- Sabre completed the remaining infrastructure upgrades. The generator startup test was completed, a problem was found with the alternator and that it will need to be replaced. The alternator is still under warranty.
- Sabre crew returned to the site January 8 to complete the remaining upgrades. Gallatin County road department plowed the road into the site. Work is scheduled to be completed by January 12.
- Motorola brought Nixon Ridge into wide area trunking for testing purposes.
- Sabre started the upgrades and got most of the work completed before the cold weather hit. The crew was sent home until after the holidays. The Automatic



- transfer Switch, grounding, generator startup test, and some electrical work is remaining.
- No activity was scheduled for this reporting period
 - Upgrades scheduled to start 1st week of December, if site is accessible.
 -
 - Site upgrades have been rescheduled to work October 2008, based on Landowner request.
 - Motorola has completed the antenna system installation.
 - Trunked radio antenna equipment has been ordered.
 - Sabre withdrew the Change Order for generator door and vents.
 - IMPM working with Sabre to reschedule the infrastructure upgrades.
 - DIR 081 - Nixon Ridge – Additional Infrastructure Upgrades - was created and submitted to IMTC, IMFC, and IMPD. It was decided by the IMFC to table the DIR until this can be discussed with Sabre.
 - NEPA Status: Approved.
 - Sabre visited the site and found that the door is too narrow to get the generator through. They also found that the exhaust fan, louvers and exhaust thimble are too small for the larger generators which produce more heat inside the generator room. IMPM has received a change order from Sabre for this work and is currently working on a DIR, which will be presented to the Finance Subcommittee at their 7/14/08 meeting. This will impact the schedule by 2-4 weeks.
 - Motorola completed antenna design.
 - Microwave contract signed 4/25/08.
 - Trunking (2007-2008)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.
 - Some trunked frequencies licenses issued.
 - Trunked equipment delivered.
 - Combiner equipment delivered.
 - Antenna system order pending design completion.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
 -
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Pacific Steel (Cascade County)

*Activities/Work Currently In Progress At This Site:*

- IMPM working with Air Force, Facility Manager, and CMIC in obtaining Air Force Amended Lease Agreement.

Issue Currently Affecting This Site:

- No interoperability frequencies. No estimated date for resolution.

Future Activities/Work Planned At This Site:

- Microwave hop to Flying J (2009), Air Force project
- Microwave hop to Building 500 (2009), Air Force project
- Trunking (2009)

Previous Activities/Work Completed At This Site:

- Combiner equipment order pending design completion.
- Antenna system order pending design completion.
- Motorola is scheduled to complete antenna system installation and optimizations by 3/6.
- Motorola installed trunked radio equipment at the Pacific Steel site.
- Motorola is scheduled to install trunked radio equipment the last week in September.
- IMPM and Roger Smith (MHP) conducted a site visit to validate that the work has been completed. Grounding is still an issue. A meeting has been scheduled to discuss the grounding issues with Sabre.
- Trunked radio antenna equipment has been ordered.
- NEPA Status: Approved.
- Motorola has delivered the trunked radio equipment.
- Requested Roger Smith (MHP) to conduct another grounding test.
- Sabre has said they fixed the grounding issues,
- Per Vince Kolar (Cascade County) the grounding issues have been resolved. Need to Roger Smith (MHP) to conduct another grounding test to verify.
- Trunking (4 trunked channels, 1 interop channel)
 - Trunked equipment on order.
- Infrastructure (100% complete, 2007)
 - Tower
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work
- Trunking (2007-2008)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked frequencies license issued.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking



- Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Patrick's Knob (Sanders County)**Activities/Work Currently In Progress At This Site:**

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- Motorola is unable to complete the installation of equipment until the site is assessable.

Future Activities/Work Planned At This Site:

- Microwave hop to W. Repeater 2 (2013)
- Trunking (2009)

Previous Activities/Work Completed At This Site:

- Microwave link to Master Control Site scheduled 6/27/08.
- Microwave system testing
- Motorola is unable to complete the site design until tower drawing and antenna placement information are provided by the IM project.
- Motorola completed antenna installations
- Trunked radio equipment was cold installed.
- IMPM working with Harris Stratex to resolve Punchlist Site Walk issues. IMPM and Roger Smith (MHP) conducted a site visit (8/20/2008) to validate that the infrastructure work has been completed.
- It was decided by the Facility Manager to remove the fence at this site.
- Harris Stratex was requested to replace all the locks as stated in the SOW, currently trying to locate the core key for the existing locks before we replace them.
- IMPM and Roger Smith (MHP) conducted site visit. Found that there was considerable winter damage to the fence. Found that the locks had not been changed yet, Harris Stratex has been notified of the locks.
- IMPM is creating Punchlist Document based on site visit.
- NEPA Status: Approved.
- Motorola has delivered the trunked radio equipment.
- Shelter upgrades (100% complete, 2007)
- Microwave hop to Pat's Knob (2007)
- Microwave hop to Cominco (2007)
- Trunking (2007)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked frequencies license issued.
 - Interoperability frequencies identified, engineered by Motorola.
 - Combiner equipment delivered.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com



- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Pinkham (Lincoln County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- Site infrastructure is to be upgraded to meet the needs of the IM. This work includes:
 - The power supply – 100 amps, need 200.
 - Cooling – An additional “window” A/C unit and exhaust fan.
- Note that because trunking is not scheduled for Pinkham until 2009, the upgrades to this site are not as time-critical as King and Blue.
- Trunked frequencies search underway. No estimated date for resolution.

Future Activities/Work Planned At This Site:

- NEPA Status: Not Submitted.
- Infrastructure upgraded (2008):
 - Electrical supply upgraded to 200 amps.
 - 200 amp distribution panel
 - Second propane tank
- Install and activate trunking (2009).

Previous Activities/Work Completed At This Site:

- BNSF is installing the IM's generator and hiring a vendor to install the additional air conditioning unit. The additional air conditioning unit is to be paid for by the IM.
- Spectrum fingerprinting to be scheduled when the site is assessable.
- BNSF is scheduling the following work (planned for completion by end of July 2008):
 - Tower extension
 - Grounding halo
 - Generator installation
- The electrician has completed most of the work on this site. The power company hasn't installed the upgraded power to the building so he was not able to hook into the transfer switch.
- Roger Guches (Lincoln County Sheriff's Office), contacted the power company and made arrangements for payment of the deposit so they will move forward on this one.
- Roger is also scheduling a trip to the site to complete an inspection and either approve or deny partial payment.
- Microwave circuits are scheduled to be extended from Pinkham to Big Mountain by 10/22 depending upon availability of rack space at Big Mountain.
- Waveguide (ice) bridges have been installed.
- DIR 063 was approved and state funding identified to pay for it.
- Lincoln County was notified that the procurement for this site can proceed.



- The IM Technical Committee's Executive Committee provided Project Management with specification for the vent fan for this site. This information was passed on to the BNSF representative so he could obtain cost estimates. The cost estimates were received the same day so the DIR could be sent to the Finance Committee.
- NEPA Status: Not Submitted. Not believed to be necessary for IM work.
- IMPM created a DIR 063 to address the infrastructure problems on this site.
- BNSF is installing the generator and hiring a vendor to install the additional air conditioning unit. The additional air conditioning unit is to be paid for by the IM.
- Air conditioners and vent fan – will be starting on it the week of 8/25/08. Anticipate that it will take 2 to 2 ½ days per site. 16" Dayton fan. Electrician will be installing the thermostat to control the fan. Kevin Fitzpatrick (BNSF) went to the sites and used a marker to draw where the fan and the A/C are to go.
- Tower sections due in any day. BNSF will be putting out a schedule for installation of the tower sections.
- Going to have to pull the outside rack. BNSF will remove it but leave it in the building so that Lincoln County can put it where they want it. There is space for five racks.
- Transfer panels have been ordered. They thought they were in stock so should be here in 2 weeks. If not in stock it could take 6 weeks to get them. Kevin will get a drawing for the electrician.
- Grounding – there is a ground system around the building and BNSF will send a diagram to the electrician so he can tie into the ground system. BNSF will put a ground bus in the IM side of the building. There is no halo in the IM side of the building.
- Training – The electrician has completed the training just has to submit it.
- Surge protection – Kevin says there will be no built-in surge protection. This was brought up primarily with respect to the trunking equipment, but further consultation with Motorola confirmed that the trunking equipment runs off batteries, providing its own surge protection.
- IMPM to confirm the rack layout with Motorola.
- Wave guide bridges are in. Executive Director of the Forest service will be out reviewing the sites next week.
- A shelter layout diagram has been produced and is in the process of approval and modification for new equipment.
- BNSF is prepping for generator installs and scheduling builders to install A/C and exhaust fans.
- Tower extension, air conditioner, and vent fan is installed.
- Generator install is completed.
- The electrician is scheduled to begin work on the Lincoln County Sites the first week of October. The transfer panels are not scheduled to arrive until the middle of October, so the Electrician will return to the site to connect the transfer panels after they arrive.
- The electrician requested information on how the vent fan and air conditioners should be set up. Bob McWilliams (IMTC Chair) instructed the exhaust fans should be set as primary, heat below 55, exhaust fan from 68 to 80 and air conditioning above 80.
- Electrical work is underway, scheduled to be completed the week of 10/20, but potentially as early as the week of 10/13 depending upon availability of utility crews.



- BNSF provided transfer switches for each King, Blue, and Pinkham so that the electrical work could be completed in one trip to each site. This will expedite the completion of these sites, scheduled for the week of 11/3.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Plentywood (Sheridan County)

Activities/Work Currently In Progress At This Site:

- Microwave connectivity has been established between this site and the LEC in Helena. Motorola has successfully communicated with the trunked radio equipment from the Master Controller.
- Motorola has completed the frequency redesign for this site.

Issue Currently Affecting This Site:

- **Motorola requires a cable tray section over the trunked equipment racks**
- Frequencies changed after the delivery of the trunked equipment. Combiner will need re-engineering.
- Decision was made to add an additional trunked channel after the delivery of the trunked equipment. Additional frequencies have not been identified. Combiner will need re-engineering.
- Trunked frequencies search underway. No estimated date for resolution.
- Frequency search and channel expansion will result in combiner modifications.

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 8/26/09.

Previous Activities/Work Completed At This Site:

- The final infrastructure walkthrough for this site is still to be held. It is not yet scheduled.
- Microwave system testing (2008)
- Trunking for this site is dependant on the completion of the microwave path through Roosevelt County.
- NEPA Status: Approved.
- Infrastructure (100% complete, 2007):
 - Tower
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work
- Microwave hop to Flaxville (2007)



- Microwave to Culbertson (2007)
- Trunking (2007)
 - Frequencies:
 - Some trunked frequencies licenses issued.
 - Interoperability frequencies identified, engineered by Motorola.
 - Trunked equipment delivered, cold installed.
 - Combiner equipment delivered.
 - Antenna system equipment delivered, installed.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Pompey's Pillar (Yellowstone County)

Activities/Work Currently In Progress At This Site:

- IM Project Management is working on NEPA documents to prepare the site for receiving microwave and trunking equipment.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Infrastructure (2008): 99% Complete
 - Tower Upgrades
 - Shelter Upgrades
 - Generator & Propane Tank
 - Electrical Work
- Microwave hop to Hysham Hills (2011)
- Microwave hop to Dunn Mt. (2011)
- Trunking (2012)

Previous Activities/Work Completed At This Site:

- IMPM, Facility Manager, and Tech Representative will conduct walkthrough to ensure all work is complete.
- NEPA Status: Approved.
- Dale Osborne changed the door knob core so new keys will fit. The back door had some problems so he had to go back out on June 20th and complete the changes.
- IM Project Management contacted Sabre to let them know that the walkthrough was done and items were noted that had not been completed. Sabre is making arrangement to complete the tasks.



- Jim Kraft (Facility Manager) met TW Enterprises at the site to complete the generator hookup, startup, and testing process. This process was completed with satisfactory results.
- IM Project Management sent the site check list to DES so that partial payment of Sabre could be made.
- Sabre is scheduling the contractor to complete the items in question.
- Contractor has scheduled the week of the 15th to finalized the items on the punch list.
- Sabre was at the site on 9/16 to complete the punch list items. IM Project Management is scheduling a site visit with Dale Osborne (MHP) to verify the work.
- IM Project Management, Dale Osborne (MHP), and Jim Kraft (facility manager) conducted a walkthrough on Wednesday, October 1, 2008. Dale checked the grounding to ensure all the corrections were completed. Dale found some readings that were high and other connections produced no reading at all. All other punchlist items were completed satisfactorily.
- After consulting with Roger Smith (MHP), IM Project Management completed a new punchlist of items that needed to be corrected at this site. The punchlist was sent to Sabre. Sabre responded with a clarification on why the OLM readings were not showing correctly. IM technical people are reviewing the references provided by Sabre and will make a decision based on the results of their research.
- A determination was made by the IMTC on the grounding that the places that showed high readings needed to be corrected which in this case is the gate post on the fence.
- Sabre subcontractor, SlaterCom, was scheduled to repair the grounding at this site on December 18th but a winter storm that passed through the state dropped the temperatures to well below zero and precluded them from doing the work. The work will be done when the weather allows.
- Sabre subcontractor SlaterCom visited this site in January to compete the punch list items. When they checked the grounding issues they said they were not issues but had not been tested correctly. They sent photos showing the readings without a connector loop and with a connector loop. IM Project Management will be going over these photos with Roger Smith (MHP) to determine if they prove the site is well grounded.
- Final payment for this site was approved by IM Project Management.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

**Red Mountain (Silver Bow County)****Activities/Work Currently In Progress At This Site:**

- IMPM completed NEPA Statement of Work for FEMA, to meet the FEMA IB 271 Requirements, next step is for IM review and send to FEMA.

Issue Currently Affecting This Site:

- The combining equipment can not be ordered until the license is issued. License needed to have been issued by 5/30/08 in order to manufacture / install combining equipment before site access is closed

Future Activities/Work Planned At This Site:

- Motorola has delivered the trunked radio equipment.
- Microwave hop to XL Heights (2010)
- Microwave hop to Beaverhead EOC (2010)
- Microwave hop to Rumsey Mt. (2013)
- Trunking (2009)
 - Frequencies:
 - Determine interoperability frequencies. No estimated date for resolution.
 - Combiner equipment order pending design completion.
 - Antenna system equipment order pending design completion.

Previous Activities/Work Completed At This Site:

- Motorola completed the antenna system design for the Red Mountain site.
- Trunked radio equipment was cold installed.
- Door to be fixed by Thermo Bond. This to be scheduled to be completed by end of September.
- NEPA Status: Approved.
- Infrastructure (100% complete, 2007):
 - Tower
 - Shelter
 - Generator & Propane Tank
 - Electrical Work
 - Fence
- Trunking (2008)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

**South Moccasin (Fergus County)****Activities/Work Currently In Progress At This Site:**

- No activity during reporting period.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Microwave hop to Highwood Baldy (2009) Air Force project
- Microwave hop to Garneill (2009) National Guard project
- Trunking (4 trunked channels, 1 interop channel, 2009)
 - Spectrum fingerprinting to be scheduled when the site is assessable.

Previous Activities/Work Completed At This Site:

- Microwave hop to Judith Peak (July 2008) National Guard project
- IMPM working with Air Force, Facility Manager, and CMIC in obtaining Air Force Amended Lease Agreement. This has been completed.
- NEPA Status: Approved.
- Infrastructure (100% complete, 2007):
 - Tower
 - Shelter
 - Generator & Propane Tank
 - Electrical Work
 - Fence

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Saco (Phillips County)**Activities/Work Currently In Progress At This Site:**

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 5/1/09.

Previous Activities/Work Completed At This Site:



- Microwave link to Master Control Site.
- Microwave system testing (2009).
- Frequencies changed after the delivery of the trunked equipment. Combiner will need re-engineering.
- Decision was made to add an additional trunked channel after the delivery of the trunked equipment. Additional frequencies have not been identified. Combiner will need re-engineering.
- Trunked frequencies search underway. No estimated date for resolution.
- Frequency search and channel expansion will result in combiner modifications.
- No interoperability frequencies. No estimated date for resolution.
- Grounding does not meet R56 Standards.
- Generator has some issues with low coolant.
- Microwave installation slippages have delayed trunked radio testing at this site since May, 2008.
- During the site walk conducted by Roger Smith (MHP) it was noted that there were some problems with the grounding.
- Motorola brought this site into wide area trunking for NTIP testing.
- NEPA Status: Approved.
- Infrastructure (100% complete, 2007):
 - Tower
 - Shelter (provided by MDoT)
 - Generator (provided by MDoT)
 - Propane Tank
 - Electrical Work
- Microwave hop to Antoine Butte (2007).
- Microwave hop to Hinsdale (2007).
- Trunking (2007)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked frequencies license issued.
 - Trunked equipment delivered, cold installed.
 - Combiner equipment delivered.
 - Antenna system equipment delivered, installed.
 - Optimization complete.
- This site was included in Motorola Change Order 006 which was approved by the IMPD Executive Board for combiner rework and channel expansion.
- Roger Smith (MHP), Dave Clouse (IMPM), and a representative of Harris Stratex completed a site visit to inspect the microwave and infrastructure at this site.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

**Santa Rita (Glacier County)**Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- None

Previous Activities/Work Completed At This Site:

- Microwave hop to Divide (2009)
- Microwave system testing (2009)
- Roger Smith (MHP), Dave Clouse (IMPM), and a representative of Harris Stratex completed a site visit to inspect the microwave and infrastructure at this site.
- Frequency issues between this site and Santa Rita are being worked on by Harris Stratex.
- NEPA Status: Approved.
- Infrastructure (100% complete, 2007):
 - Shelter Upgrades
 - Electrical Work
- Microwave hop to Mt. Royal (2007)
- Microwave hop to Belgian Hill (2007)

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Mark Adams, (406) 443-8676, Mark.E.Adams@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

Sawtell-IM (Beaverhead County)Activities/Work Currently In Progress At This Site:

- The Environmental Assessment report has been rescheduled to be delivered around the 1st of April 2009.
- IM Project Management to send out to Sabre the Infrastructure SOWs for the PSIC IJ2 Sites requesting price quotes.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Infrastructure (12% complete, 2010):
 - Tower
 - Shelter
 - Generator & Propane Tank



- Electrical Work
- Microwave hop to Antelope Peak (2010)
- Microwave hop to VC Pass (2010)
- Microwave hop to Duck Creek (2010)
- Trunking (2013)

Previous Activities/Work Completed At This Site:

- IMPM received the completed Soil Analysis report.
- EA engineers could not make it to the site due to snow. IMPM is currently working with the engineer's on options for gathering/conducting the information required for the NEPA. This site is in PSIC Investment Justification #1 and the whole IJ1 needs to be submitted as a package to FEMA. If the engineers have to go on-site to gather their information, then it could be as late as June 2009 before they can conduct the study once the ground is cleared of snow.
- IMPM contacted the Forest Service to obtain a copy of their report that the new site is with in the footprint of the approved FAA radio site.
- IMPM provided copies of Statement of Work to IMTC Chair and IM Executive Director for review.
- Soil Study currently under way.
- The Environmental Assessment engineers could not make it to the site to conduct the FEMA Environmental Assessment study as the site was inaccessible due to snow and the plow could not make it to the site. This is currently being rescheduled, possibly for sometime in the spring. This will needs to be completed earlier as the report needs to be submitted as a package to FEMA as it is one of the projects in the PSIC Grant. Discussions are proceeding on how to resolve.
- The engineering company could not make it to the site to conduct the Soil Study as it was snowed out, they are currently looking at rescheduling this as soon as they can get access to the site.
- IMPM, IMTC Chair (Bob McWilliams) and Sabre sub-contractor conducted site visit on 10/28.
- IMPM created the FEMA NEPA Compliance Statement of Work and sending it to DMA for procurement. The purpose is for gathering information for the IB 271 Requirements.
- IMPM waiting for directions on next steps regarding impact of the FEMA requirement for the IB 271.
- Finalize the Statement of Work and obtain Facility Manager Approval.
- NEPA was rejected by FEMA. Must be resubmitted with IB 271 information. IMPM waiting for directions on next steps regarding impact of the FEMA requirement for the IB 271.
- NEPA Status: Rejected.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

**Scobey (Daniels County)**Activities/Work Currently In Progress At This Site:

- Motorola ordered the combining equipment for the frequency changes and channel expansion for this site.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 8/26/09.

Previous Activities/Work Completed At This Site:

- Microwave system testing (2008)
- The final infrastructure walkthrough for this site is yet to be held. It is not yet scheduled. Tentatively scheduled for the week of 8/25/08.
- Motorola has completed the frequency redesign for this site.
- Trunking for this site is dependant on the completion of the microwave path through Roosevelt County.
- Frequencies changed after the delivery of the trunked equipment. Combiner will need re-engineering.
- Decision was made to add an additional trunked channel after the delivery of the trunked equipment. Additional frequencies have not been identified. Combiner will need re-engineering.
- Frequency search and channel expansion will result in combiner modifications.
- Site walk conducted by Roger Smith (MHP) found problems with the grounding at this site.
- Trunked frequency license issued.
- NEPA Status: Approved.
- Trunked frequencies search underway. No estimated date for resolution.
- Infrastructure (100% complete, 2007):
 - Tower
 - Shelter Upgrades
 - Generator.& Propane Tank
 - Electrical Work
- Microwave hop to Flaxville (2007)
- Trunking (2007)
 - Frequencies:
 - Some trunked frequencies licenses issued.
 - Interoperability frequencies identified, engineered by Motorola.
 - Trunked equipment delivered, cold installed.
 - Combiner equipment delivered. Frequency search and channel expansion will result in combiner modifications.
 - Antenna system equipment delivered, installed.
- The rodent problem was remedied by Dale Osborne (MHP)

*IM Project Managers For This Site:*

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Scout Hill (Roosevelt County)*Activities/Work Currently In Progress At This Site:*

- No activity on this site during this reporting period.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- None

Previous Activities/Work Completed At This Site:

- Microwave system testing (2009)
- Generator and propane Tank will be installed.
- Some concern expressed that TAB Electronics will not be done with the site in time for Deadman Butte microwave to talk to Culbertson. This will prevent IM sites east of Scout Hill from coming online this year.
- TW Enterprises was scheduled to install the generator at this site the week of December 15th but had to reschedule due to weather.
- TAB Electronics is working on the grounding at this site in preparation of the microwave coming up..
- Infrastructure (2007):
 - Tower (Roosevelt County)
 - Shelter (Roosevelt County)
 - Generator.& Propane Tank (IM)
 - Electrical Work (Roosevelt County)
- Status of microwave equipment is not known.
- IMPM created DIR 059 to begin the process of getting approval to place a 60 KW generator at the Scout Hill site. The DIR was presented to the IMTC on April 24th. IMTC approval was obtained and, after obtaining finance approval from the IMFC, the DIR was approved by the IMPD on May 6th.
- NEPA Status: Approved.
- TAB Electronics has committed to having the Roosevelt County microwave system installed, tested, and ready for acceptance by 11/1/2008.
- Roosevelt County received the award letter for placing the generator at this site. The NTIP representative for Roosevelt County contacted the Generac dealer and ordered the generator. ETA on the generator is approximately six weeks
- TW Enterprises installed the generator at this site on January 22nd. IM Project Management and the representative of Roosevelt County was scheduled to



complete an inspection of the work on January 23rd but the propane company was unable to install the propane tank so the inspection was cancelled.

- The propane company was unable to get to the site to install the propane tank so the site walk that was scheduled for the 23rd was moved to the following week. Dan Sietsema (Roosevelt County) visited the site to ensure the tank was properly installed the week of the 26th and then Roger Smith (MHP) and Dale Osborne (MHP) completed an inspection of the site on Wednesday, February 4th.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Mark Adams, (406) 443-8676, Mark.E.Adams@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

Shane Ridge (Carbon County)

Activities/Work Currently In Progress At This Site:

- Dynamic Environment is waiting on responses from some of the Tribal Nations so they can complete the Environmental Assessment on this site.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Infrastructure (green site, 2010):
- Microwave hop to Greycliff (2010)
- Microwave hop to Greeno (2010)
- Trunking (2012)

Previous Activities/Work Completed At This Site:

- NEPA Status: Not Submitted.
- IMPM has the SOD complete and will finalize it once the site is selected.
- IM Project Management, Dale Osborne (MHP), Ken Mesch (Stillwater County DES), and Bruce Brown (FBI) conducted site walk survey of all three sites. Bruce recorded the coordinates so that Dale Osborne could get coverage and path information for each.
- IMPM began creating NEPA and Soil Sample Statement of Work documents to go out for bid for this site.
- This information will be used to determine the best site.
- IMPM completed the NEPA Study and soil sample Statement of Work documents and sent them to PSSB for procurement.
- A contract was signed to complete NEPA work on this site. The contractor is scheduled to conduct site visits the middle of November.
- Also, Sabre was contracted to complete upgrades to this site and will be conducting soil sample work on this site the 2nd week of November. Tower Systems out of South Dakota will be completing the infrastructure upgrades for Sabre and will be reviewing this site on Tuesday 11/5.



- IM Project Management, Bruce Brown (FBI) and Dale A. Holzheimer (IC&E radio shop) in Billings visited this site on Tuesday, November 4th with Ron Schafer (Tower Systems). Mr. Schafer will be bidding on this site as a subcontractor to Sabre.
- IM Project Management coordinated with David Jermakian (Dynamic Environmental, Inc.) to complete an Environmental Assessment in accordance with the National Environmental Policy Act (NEPA). This process ensures that changes to the site will not have a negative impact on the environment.
- Dynamic Environmental Inc. visited this site to begin the environmental assessment required by the NEPA process.
- GeoScience visited this site to begin the soil survey process. They will provide a report based on their study to IM Project Management.
- IM Project Management is gathering the FEMA IB 271 requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.
- IM Project Management sent land owner information to Dynamic Environmental.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Sherry Evans, (406) 583-7552, sherry.evans@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Sierra (Madison County)

Activities/Work Currently In Progress At This Site:

- IM Project Management received CD containing the AMEC Environmental Assessment document. Currently waiting for the remaining Environmental Assessment documents from Dynamic Environmental Assessment engineering firm so that all of the PSIC IJ2 and IJ1 Sites can be submitted to FEMA.
- IM Project Management to send out to Sabre the Infrastructure SOWs for the PSIC IJ2 Sites requesting price quotes.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- NEPA Status: Not Submitted.
- Infrastructure (7% complete, 2010):
 - Tower
 - Shelter
 - Generator & Propane Tank
 - Electrical Work
 - Fence
- Microwave hop to VC Pass (2010)
- Microwave hop to Beaverhead EOC (2010)
- Trunking (2013)

*Previous Activities/Work Completed At This Site:*

- IMPM received the Environmental Assessment report from AMEC on February 18. Currently waiting for the electronic version so that we can send it in to FEMA for review and approval.
- IMPM packaged up the Statement of Work with the other PSIC IJ2 sites to be sent to Sabre for pricing.
- Received Soil Study report.
- IMPM provided copies of Statement of Work to IMTC Chair and IM Executive Director for review.
- Soil Study scheduled to be conducted on 11/3.
- IMPM, IMTC Chair (Bob McWilliams) and Sabre sub-contractor conducted site visit on 10/28.
- EA study currently under way.
- Sow for Soil Analysis developed, IMPM working with PSSB to package for procurement.
- Bob McWilliams (Beaverhead County and Facility Manager) has obtained a contractor to conduct the Environmental Assessment Study. The study is scheduled to be completed September 30, 2008.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Sullivan (Cascade County)*Activities/Work Currently In Progress At This Site:*

- IMPM working with Air Force, Facility Manager, and CMIC in obtaining Air Force Amended Lease Agreement.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Trunking (4 trunked channels, 1 interop channel, 2009)
 - Spectrum fingerprinting to be scheduled when the site is assessable.

Previous Activities/Work Completed At This Site:

- Microwave equipment move from old site completed
- Microwave hop upgrade to 5 9's to Wirth (May 2008)
- Microwave hop to Teton Ridge (May 2008)
- Microwave hop upgrade to 5 9's to Flying J (June 2008)
- Interconnection of NTIP from Teton to MTNG path to Wirth (May 2008)



- NEPA Status: Approved.
- Infrastructure (100% complete, 2008)
 - Tower
 - Shelter
 - Generator.& Propane Tank
 - Electrical Work

Air Force Agreement Status:

- EA (Environmental Assessment) – completed - Dave Hinds, Malmstrom AFB
- Site Use Agreement – in progress - Dave Hinds, Malmstrom AFB
- Site Sub-Lease – in progress - Dave Hinds, Malmstrom AFB
- Economic Analysis – completed - Dave Hinds, Malmstrom AFB
- Bill of Sale – transfer of property to local agency – in progress - Dave Hinds, Malmstrom AFB
- Dept of Air Force right of entry for construction – in progress - Dave Hinds, Malmstrom AFB

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Teton Ridge (Teton County)

Activities/Work Currently In Progress At This Site:

- Working with Facility Manager, CMIC Director, and Air Force in obtaining an amended lease for the Air Force.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- The Air Force is considering providing a second shelter and upgrading the electrical service in order to accommodate their radio equipment.
- Trunking (2012)

Previous Activities/Work Completed At This Site:

- Microwave hop to Sullivan (2009)
- Microwave system testing (2009)
- NEPA Status: Approved.
- Infrastructure (for microwave, 100% complete, 2007):
 - Tower
 - Shelter Upgrades
 - Propane Tank



- Electrical Work
- Microwave hop to Belgian Hill (2007)

Air Force Agreement Status:

- EA (Environmental Assessment) – completed - Dave Hinds, Malmstrom AFB
- Site Use Agreement – in progress - Dave Hinds, Malmstrom AFB
- Site Sub-Lease – in progress - Dave Hinds, Malmstrom AFB
- Economic Analysis – completed - Dave Hinds, Malmstrom AFB
- Bill of Sale – transfer of property to local agency – in progress - Dave Hinds, Malmstrom AFB
- Dept of Air Force right of entry for construction – in progress - Dave Hinds, Malmstrom AFB

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Timberline (Gallatin County)

Activities/Work Currently In Progress At This Site:

- The NEPA Statement of Work for the microwave and trunking installation is currently ready to be sent to FEMA for their review.
- IMPM received the invoice for the 200 amp service upgrade. It was about \$1,100 more than was estimated. This was due to multiple site visits by the electrical company to assess the work and actually complete the work. Weather played a factor also.
- IMPM, Frank Smith (Facility Manager), and Roger Smith (Interoperability Montana) conducted Punchlist Site walk. All infrastructure upgrades have been completed.

Issue Currently Affecting This Site:

- Frequencies:
 - No interoperability frequencies. No estimated date for resolution.

Future Activities/Work Planned At This Site:

- Microwave to High Flat (2010)
- Microwave to Greycliff (2010)
- Trunking, 4 trunked channels, 1 interop channel (2010)
 - Antenna system order pending design completion.

Previous Activities/Work Completed At This Site:

- Infrastructure (100% complete, 2009)
- The electrical 200 amp service work has been completed. Site walk needs to be scheduled.



- IMPM received a verbal quote for approximately \$3,500 to complete the 200 amp service upgrade. Electricians have not been able to get to the site, the plan is for them to hopefully complete the work by the end of January.
- IMPM received price quote to upgrade the electrical service to 200 amp. The price was \$10,940. The quote was sent to Bob McWilliams (IMTC Chair) for a determination on how to proceed. Working on obtaining local quote to complete the upgrade.
- Generator start-up test completed.
- Punchlist site walk completed, the vents and louvers for the generator room did not need to be replaced.
- Motorola has completed the antenna system installation.
- IMPM was notified by Contractor that the site only has 100 amp service instead of the 200 amp service that was documented in the site walk. Sabre withdrew the Change Order for generator door and vents.
- IMPM working with Sabre to reschedule the infrastructure upgrades.
- Trunked radio antenna equipment has been ordered.
- IMPM is currently waiting for discussion concerning the Change Order from Sabre.
- DIR 082 - Timberline – Additional Infrastructure Upgrades - was created and submitted to IMTC, IMFC, and IMPD. It was decided to table the DIR until this can be discussed with Sabre.
- NEPA Status: Approved.
- Sabre visited the site and found that the door is too narrow to get the generator through. They also found that the exhaust thimble is too small for the larger generator. IMPM has received a change order from Sabre for this work and is currently working on a DIR, which will be presented to the Finance Subcommittee at their 7/14/08 meeting. This will impact the schedule by 2-4 weeks.
- Motorola completed antenna design.
- Microwave contract signed 4/25/08.
- Trunking (2008)
 - Frequencies:
 - Trunked frequencies identified, engineered by Motorola.
 - Trunked frequencies license issued.
 - Trunked equipment delivered.
 - Combiner equipment delivered.
 - Antenna system order pending design completion.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

**Virginia City Pass (Madison County)****Activities/Work Currently In Progress At This Site:**

- IM Project Management ready to send NEPA to FEMA, as soon as we hear from FEMA that the format and content that was sent for the Beaverhead EOC is acceptable.
- IM Project Management to send out to Sabre the Infrastructure SOWs for the PSIC IJ2 Sites requesting price quotes.

Issue Currently Affecting This Site:

- None
- Waiting for BLM approval.

Future Activities/Work Planned At This Site:

- Infrastructure (13% complete, 2010)
 - Tower
 - Shelter
 - Generator & Propane Tank
 - Electrical Work
 - Fence
- Microwave hop to Sierra (2010)
- Microwave hop to Sawtell (2010)
- Microwave hop to Lone Mountain (2012)

Previous Activities/Work Completed At This Site:

- No word from FEMA on whether the CER report is acceptable for Environmental Assessment approval.
- IMPM has started work on developing the NEPA Statement of Work to be sent to FEMA along with the CER received from BLM.
- IMPM received the results of the Soil Study, these were forwarded on to the Facility Manager.
- IMPM working on gathering the FEMA IB 271 Requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.
- Soil Study currently under way.
- IMPM provided copies of Statement of Work to IMTC Chair and IM Executive Director for review.
- IMPM waiting for NEPA approval.
- Soil Study scheduled to be conducted on 11/4.
- IMPM, IMTC Chair (Bob McWilliams) and Sabre sub-contractor conducted site visit on 10/28.
- Finalize the Statement of Work and obtain Facility Manager Approval.
- NEPA was rejected by FEMA. Must be resubmitted with IB 271 information. IMPM waiting for directions on next steps regarding impact of the FEMA requirement for the IB 271.
- NEPA Status: Rejected.

IM Project Managers For This Site:



- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

WAPA Chinook (Blaine County)

Activities/Work Currently In Progress At This Site:

- No activity was scheduled for this reporting period

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- Microwave system testing (2008)

Previous Activities/Work Completed At This Site:

- Upgrade of microwave capacity to OC-3 contracted and tentatively schedule for mid-July 2008 for Antoine → WAPA → HCSO
- WAPA is going to have both their old and new microwave system on the tower at the same time. This is due to their phase in approach on replacing the old system. They are already in the process of having the tower analyzed for both of their microwave antennas being on the tower at the same time. Depending how that turns out will determine if IM PROJECT can add the additional antenna for the Blaine County hop. Roger Smith (MHP), Dave Clouse (IMPM), and a representative of Harris Stratex completed a site visit to inspect the microwave and infrastructure at this site.
- Current Scope
 - Last mile hop is needed between the WAPA site and Blaine County courthouse to connect the radio console to the system. A second hop from the courthouse to the MTNG Armory is needed. Total capacity is four (4) T-1s'
- Current Overall Status
 - Received information on equipment for letter to WAPA. Kevin Bruski (MDoT) will write letter to WAPA requesting permission to use the tower for these new hops.
 - Once permission is granted, will work on engineering aspects of the path and obtain quote for the work from vendors.
- Activity This Period
 - Microwave Sub-committee determined Motorola supplied microwave will not meet the needs for this hop. H/S provided a path analysis and equipment description so Kevin can submit a request to use the tower.
- Anticipated Activity Next Period Or Beyond
 - Permission from WAPA, engineering review of the path and develop a Statement of Work for quote for the equipment and installation.
- NEPA Status: Approved.
- Infrastructure (100% complete, 2007):
 - Shelter Upgrades



- Propane Tank
- Electrical Work
- Microwave hop to HCSO (2007)
- Microwave hop to Antoine Butte (2007)
- WAPA was removed from the NTIP contract with Harris Stratex.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Mark Adams, (406) 443-8676, Mark.E.Adams@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com

Windy Hill (Roosevelt County)

Activities/Work Currently In Progress At This Site:

- IM Project Management completed and submitted a NEPA Statement of Work on this site for adding a MUX to the microwave equipment.

Issue Currently Affecting This Site:

- Lack of microwave connectivity to this site is delaying placing it into wide area trunking.

Future Activities/Work Planned At This Site:

- Microwave system testing (2009)
- Include this site in Customer Acceptance Testing when it resumes, currently scheduled to be completed 8/26/09.

Previous Activities/Work Completed At This Site:

- Frequencies changed after the delivery of the trunked equipment. Combiner will need re-engineering.
- Decision was made to add an additional trunked channel after the delivery of the trunked equipment. Additional frequencies have not been identified. Combiner will need re-engineering.
- Trunked frequencies search underway. No estimated date for resolution.
- Frequency search and channel expansion will result in combiner modifications.
- Some concern expressed that TAB Electronics will not be done with the site in time for Deadman Butte microwave to talk to Culbertson. This will prevent IM sites east of Scout Hill from coming online this year.
- TW Enterprises was scheduled to exchange the generator at this site the week of December 15th but had to reschedule due to the weather.
- IM Project Management visited the Windy Hill site on 9/19/08. TAB Electronics and Northwest Towers were working together to get the dishes hung on that tower. They had the brackets up for the dishes and the next day they began hanging dishes on the tower. The radio equipment is in the shelter and ready to be connected.
- NEPA Status: Approved.
- Infrastructure (2007):
 - Tower (Roosevelt County)



- Shelter (Roosevelt County)
- Generator & Propane Tank (IM - complete)
- Electrical Work (Roosevelt County)
- Status of microwave equipment is not known.
- Trunking (2007)
 - Frequencies:
 - Interoperability frequencies identified, engineered by Motorola.
 - Trunked equipment delivered, cold installed.
 - Combiner equipment delivered.
 - Antenna system equipment delivered, installed.
 - TAB Electronics has committed to having the Roosevelt County microwave system installed, tested, and ready for acceptance by 11/1/2008.
- The final dish was hung on this tower this week and TAB Electronics is working on finalizing the site.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Mark Adams, (406) 443-8676, Mark.E.Adams@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8676, Mark.E.Adams@ngc.com

Wirth Ranch (Lewis & Clark County)

Activities/Work Currently In Progress At This Site:

- EA study currently under way, report scheduled to be submitted to IM the first week of February 2009.
- IMPM followed up on progress of Lease Agreement. It is still being negotiated.
- The Infrastructure Statement of Work is ready for review.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- IMPM to follow up on Lease Agreement.
- Upgrade of microwave path to 5'9s scheduled for completion June 2008, site access at Hogback has slowed progress. 50% complete.
- Infrastructure (1% complete, 2008):
 - Generator & Propane Tank
 - Electrical Work

Previous Activities/Work Completed At This Site:

- IMPM working on gathering the FEMA IB 271 Requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.
- IMPM provided copies of Statement of Work to IMTC Chair and IM Executive Director for review.



- NEPA Environmental Assessment Compliance study scheduled for 11/11.
- NEPA Status: Approved.
- Lease agreement reached between land owner and MHP.
- Infrastructure
- Microwave
- Trunking

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
 - Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

XL Heights (Jefferson County)

Activities/Work Currently In Progress At This Site:

- IM Project Management currently waiting for the Environmental Assessment documents from Dynamic Environmental Assessment engineering firm so that all of the PSIC IJ1 Sites can be submitted to FEMA.
- Infrastructure Statement of Work is nearing completion, just putting the information in for a new roof on the shelter.

Issue Currently Affecting This Site:

- None

Future Activities/Work Planned At This Site:

- NEPA Status: Not Submitted.
- Infrastructure (0% complete, 2010):
 - Soil Study needed for new tower
 - Tower
 - Shelter work
 - Generator & Propane Tank
 - Electrical Work
- Microwave hop to Bull Mt. (2010)
- Microwave hop to Lost Creek (2010)
- Microwave hop to Red Mountain (2010)
- Trunking (2010 or later)

Previous Activities/Work Completed At This Site:

- IMPM to follow up with Sally Buckles regarding purchasing discussions.
 - Purchase Site (2008)
- The Environmental Assessment report has been rescheduled to be delivered around the 1st of April 2009.
- EA engineers could not make it to the site due to snow. IMPM is currently working with the engineer's on options for gathering/conducting the information required for



the NEPA. This site is in PSIC Investment Justification #1 and the whole IJ1 needs to be submitted as a package to FEMA. If the engineers have to go on-site to gather their information, then it could be as late as June 2009 before they can conduct the study once the ground is cleared of snow.

- IMPM working on gathering the FEMA IB 271 Requirements to be added to the Statement of Work to be sent to along with the NEPA for approval.
- IMPM provided copies of Statement of Work to IMTC Chair and IM Executive Director for review.
- The Environmental Assessment engineers could not make it to the site to conduct the FEMA Environmental Assessment study as the site was inaccessible due to snow and the plow could not make it to the site. This is currently being rescheduled, possibly for sometime in the spring. This will need to be completed earlier as the report needs to be submitted as a package to FEMA as it is one of the projects in the PSIC Grant. Discussions are proceeding on how to resolve.
- A new 100' tower is planned to be installed. IMPM will work with Dunne Communications to obtain a copy of the original Soil Study.
- NEPA Environmental Assessment Compliance study scheduled for 11/7.
- IMPM and Sabre sub-contractor conducted site visit on 10/22.
- IMPM developed the Statement of Work for the NEPA Environmental Assessment study which PSSB is packaging to send out for procurement IMPM created the FEMA NEPA Compliance Statement of Work and sending it to DMA for procurement. The purpose is for gathering information for the IB 271 Requirements.
- Sally Buckles (Jefferson County DES) is working the owners to obtain only about 3 acres of the 17 acre site. Purchasing discussions are proceeding.
- Sally Buckles (Jefferson County DES) and Bruce Brown (FBI) met with the site owners regarding the purchasing of the site. The owners are interested in selling and Sally is working on the next steps so that they can proceed with purchasing the site.

IM Project Managers For This Site:

- Infrastructure (civil construction: towers, shelters, generators, etc.)
 - Tom Smith, (406) 443-8687, tom2.smith@ngc.com
- Microwave
 - Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
- Trunking
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Microwave

Gallatin Ring

Current Scope

- Install the ring sites at High Flat, Gallatin EOC, Kenyon WT, Bozeman L&J to High Flat. DOT has provided the High Flat to Gallatin EOC hop on the ring.
- Fix the path between High Flat and Timberline by raising the antenna at High Flat to 80 feet.

Current Overall Status

- Gallatin Ring Installation is complete, completion reports have been received. A site walk was conducted 9/24/08 to identify punch list items.
- Raising the antenna at High Flat did not fix the path. It has been determined that the High Flat to Timberline hop has an interference issue. DIR 115 and new Contract Quote from Harris Stratex has been sent to the IM Project for review and approval. Future reporting is in the South Leg status report.
- Additional work which is outside the scope of the Gallatin Ring contract was required to activate and provision the T-1's on the existing MDT path through Nixon, Bull Mtn., XL Heights, Lost Creek and McDonald pass to the LEC. A contract was signed by the Montana Army National Guard to provision the T-1's to Helena and provides them with the T-1 connectivity MTNG needs to Belgrade. This project has been completed

Issues that will affect final acceptance and/or use of the microwave.

- Until the South Leg is upgraded to five (5) nines the path from Bozeman to the LEC will not be operating at the IM standard and this may affect the performance of the trunking radio equipment
- The interference issue between Timberline and Highflat must be corrected before the microwave can be used to connect Timberline to the LEC. (see **South Leg report**)

Activity This Period

- Punch completed for site walk tentatively scheduled for March 26 or 27
- Provision installation to monitor and manage the entire network has been started. Data from Provision is needed to assess intermittent problems with the path between Helena and the Gallatin ring.

Previous Activity

- Invoices for the Gallatin Ring were received, per the state term contract payment of 75% will be made with 25% withheld until final acceptance

IM Project Managers For This Work:

- Microwave
 - Primary: Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
 - Backup: Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com



Lewis & Clark Parallel Path

Note: Passive path between the Helena Armory and Fort Harrison affects site monitoring, microwave path monitoring and circuits needed by the FBI, MTNG, Mobile Data, and MHP.

Current Scope

- Install a new parallel path (to the L&C ring) with dual polarity antenna's to carry trunking T-1's to the Master Control Site in the Lewis & Clark Law Enforcement Center and the data, site monitoring, FBI, and MTNG traffic to Fort Harrison via a passive path (Armory to Fort Harrison).

Current Overall Status

- Parallel path between McDonald Pass and the LEC is installed and tested. NTIP west is connected to the parallel path. T-1 plan to connect Gallatin Ring has been completed.
- DOA has requested a tower study be conducted for the Armory tower
- Tower upgrade at Fort Harrison has been completed
- Waiting for HSTX quote to re-mob the crew to finish the microwave installation

Activity This Period

- Parallel Path is installed and completed, Passive Path to be completed under change order 69 and redeployment of crew to Fort Harrison. DIR 122 for crew re-mob approved. Work is scheduled to begin April 8.

IM Project Managers for This Work:

- Microwave
 - Primary: Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
 - Backup: Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Lewis & Clark Ring

Current Scope

- Ring sites include McDonald Pass, Belmont, Wirth Ranch, Hogback, LEC, Stark Armory to McDonald Pass. Upgrade existing 28T ring to 84t. The Lewis & Clark Ring upgrade was defined in the IMTC Network plan to carry a small part of microwave traffic to the Master Control Site in the Lewis & Clark Law Enforcement Center.

Current Overall Status

- Ring upgrade is completed.
- System acceptance and invoice processing have been completed.

Activity This Period

- No activity further activity is scheduled. This project is complete.

IM Project Managers For This Work:



- Microwave
 - Primary: Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
 - Backup: Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

NTIP East Side (connection of NTIP East sites to the controller)

- ***Current Overall Status:*** The NTIP East "Sullivan→Deadman" microwave has been installed and completion reports have been received. Cross connects at Sullivan and upgrade of the MTNG path to Hogback has been completed. The Northeast Section between Scobey→Flaxville→Plentywood→Culberson has been connected through the Roosevelt County system and completion reports have been received
- Roosevelt County Microwave installation has been completed but Roosevelt County has not conducted BERT testing of their system.
- The NTIP system is running error free with no reported problems during his reporting period.

Issues that affect the final acceptance or use of the microwave

- Site walk to inspect the microwave installation at Divide has not been completed.

Activity This Period

- Continuing to work with Harris Stratex to complete punch list items
- DIR, Quote and Statement of Work to install a Mux at Windy Hill has been submitted to the IM Project. The Trunking equipment is installed but can not be connected to the controller until a T-1 is provided.
- Provision installation to monitor and manage the entire network has been started.

Previous Activity

- Fuji Mux has been installed at Belgian and Teton sites.
- All the Fujitsu Mux software has been upgraded to the same version
- Motorola reported that the T-1 to Saco was not working, Harris Stratex hired snowmobile transport and went to Saco, tested the T-1 to the LEC, no problem with the T-1 could be found.
- In December Harris Stratex sent technicians to resolve the microwave problems between Sullivan and Santa Rita. Roger Smith and technician spent several days going to the various sites troubleshooting the problem. Bob Partin also flew in and joined them. Two problems were identified at Belgian and were fixed. The system seemed to be running fine but the day after everyone left a new problem began.
- Site walks to inspect the NTIP microwave were completed and punch list of items to be corrected has been developed
- Fuji Mux Software upgrade is being completed.
- Harris Stratex is working on a way to monitor the system to determine the cause of the suspected interference problem. This problem is intermittent.

Windy Hill

Scope – install M13 mux and Channel bank equipment for the trunking equipment budgeted for this site.

Overall Status – The FBI has purchased an Interplex for the site.



Activity This Period – Quote and Statement of Work submitted to IM Project for procurement.

Previous Activity

- RFQ for Mux equipment and provisioning of T-1's written and approved by IM Project. RFQ sent to Harris Stratex

**MONTANA NATIONAL GUARD PARTNER FUNDED ACTIVITIES****Project MTNG-1 - Upgrade Microwave Path to 5 9's – Flying J → Sullivan → Wirth → Hogback → Fort Harrison***Current Scope*

- The path upgrade includes dual polarity high performance dish antenna's to correct an interference problems and provide additional capacity for the IM Project, upgrading Sullivan → Flying J to five 9's by making it a diversity path. Installation of equipment on this contract is complete and final acceptance testing remains.

Current Status

- Project has been completed.

Project MTNG-2 — New microwave hops between South Moccasin → Judith → Antoine and upgrade to HCSO provide a clock at the HCSO.*Current Scope*

- 2 new hops (S. Moccasin to Judith to Antoine Butte) using TruPoint OC3 radios and upgrade 2 hops HCSO-WAPA-Antoine Butte to OC3 and include upgrading HCSO Fuji mux to ADM. Provide GPS microwave system clock at HCSO.

Current Overall Status

- Installation of equipment is complete, completion reports have been received, site walks are complete, and hop testing has been completed, punch list item at Judith Peak remains to be completed.

Activity This Period –

- Invoice for project received by the MTNG, 75% is being paid per the terms of the state term contract and 25% withheld until final acceptance.

Project MTNG-3 -- Move Blue/Pinkham/Big Mountain to South Moccasin/Cooney/Garneill

NOTE: Then NTIP microwave hops between King/Blue/Pinkum/Big Mountain was purchased by the Montana Army National Guard (MTNG) and the equipment is stored at a DOT facility in Lewistown. Because the NTIP was not able to secure sites in Northwestern region and contracted with BSNF for the microwave bandwidth, these hops were designated to be moved to the South Moccasin/Garneill/Cooney sites. The MTNG is funding the move.

Issues that will affect installation and final acceptance

The installation is dependant on the Air Force building the Cooney site and providing the power line, generator and fence at the Garneill site.

Current Scope

- Move equipment that was originally purchased for the NTIP west sites to the new path "South Moccasin-Garneill-Cooney" and upgrade the path to 16 T capacity. New antenna systems will be required.

*Current Overall Status*

- Contract signed. Microwave licensing submitted to coordination. Equipment is ready to be installed.

Activity This Period – NONE

PROJECT DELAY - Garneill and Cooney infrastructure work needs to be completed by the Air Force. See AF status below.

Previous Activity

- Microwave licensing is submitted for coordination.
- Vendor site visits, as a part of the Air Force bid process were completed for infrastructure work at Belgian, Teton, Garneill and Cooney.

IM Project Managers for This Work:

- Microwave
 - Primary: Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
 - Backup: Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

NTIP West – Original NTIP Contract*Current Overall Status*

Microwave is running in a test mode, no reports of problems have been received this reporting period.

Path from McDonald Pass to Big Mountain is installed and tested. The B-side of the diversity path Pats Knob to Miller functioning below the design specification due to a damaged antenna. The cross-connect to the L&C Parallel path to the trunking controller at the LEC has been completed. The BNSF microwave cross connect at Big Mountain is complete. Microwave completion reports have been received from Harris Stratex, site walk was completed in November.

Issues that may affect the use of the microwave

- Replacement of the antenna at Pats Knob to fix the diversity path due to winter storm damage.
- Site walk to inspect the microwave installation at Cominco has not been completed.

Activity This Period

- Continuing to work with Harris Stratex to complete punch list items
- Provision installation to monitor and manage the entire network has been started.
- Recent data on the path indicates there is an antenna alignment problem with the Cominco to Miller hop. A site walk is being planned with HSX to correct the problem. It is not affecting traffic.



Issues affecting progress

- Waiting for IM Project approval of Pats Knob antenna quote

Previous Activity

- DIR and quote to replace the Pats Knob antenna is has been submitted to the IM Project process.
- Site walks to inspect the NTIP microwave were completed and punch list of items to be corrected has been developed.
- BNSF MW is connected to the NTIP.
- Ice shield at Pat's Knob has been repaired.



Upgrade Blacktail to Big Mountain hop to 28 T.

Background

The microwave hop between Blacktail and Big Mountain under the original NTIP contract has a capacity of 16 T-1s. The T-1's for Kalispell were intended to connect on the Blacktail to Kalispell Water Tank hop. The tower at Blacktail had to be reduced in height and the dish antenna's could not be installed locations needed on the water tank due to structural or safety considerations. The design was changed to connect Kalispell at Big Mountain resulting in a minimum of 20 T-1's needing to be carried on the hop now. The next upgrade step from 16 T's for the equipment is to 28 T.

Current Scope

Upgrade the microwave hop between Blacktail and Big Mountain to 28T capacity and complete the provisioning of all the T-1's.

Current Overall Status

The equipment listed in the quote has been ordered and is in storage in Lewistown. The licensing of the hop has been completed. Installation requires tower climbing, removal of old equipment and installation of new equipment. Crews must be able to drive to the sites. This work will not be accomplished until spring because of the winter access issues at both Big Mountain and Blacktail Mountain.

Activity This Period

- MW licensing is complete
- Requested project plan for installation from Harris Stratex

Previous Activity

- The quote and Statement of Work submitted to the ITPR process
- Contract completed ITPR process. PSSB is sending to IM Project for final signature.

Anticipated Activity Next Period Or Beyond

- Work out details and schedule cross connect to BSNF equipment. BNSF is expected to be ready to hand off the T-1's in mid September.

Kalispell Water Tank to Blacktail hop

Current Overall Status

- The hop between Blacktail and Kalispell water tank is complete.

Activity This Period

- No activity planned for this period

Previous Activity

- Testing of the hop was completed by Harris Stratex.



- The City of Kalispell has determined the Dish must be mounted on Tank leg and has approved an installation alternative at 55 ft with the radio installed at the bottom of the tank leg. Installation will require waveguide, dehydrator and compressor and microwave License.
- The mounting configuration has been approved by the City of Kalispell
- IMPD approved the change order and funding. A contract has been signed.
- Installation and hop testing were completed

IM Project Managers for This Work:

- Microwave
 - Primary: Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
 - Backup: Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

South Leg – McDonald Pass to Dunn Mtn

Current Overall Status

- Upgrade the microwave path from McDonald Pass to Shane Ridge to 84T capacity at 5 9's availability. The path was originally installed by the Mobile Data consortium and upgraded to hot standby, 28 T capacity by the MDoT. BER testing has never been conducted on the path or any of the hops.
- Infrastructure work will be required at Lost Creek, XL Heights, Bull Mtn, Greycliff, Shane Ridge, Greeno, Coburn, and Dunn Mtn. to hold the antenna systems for this project. Several hops will require diversity antenna systems.
- The final design for McDonald Pass to Shane Ridge has been received from Harris Stratex. The path from Greeno, Coburn and Dunn Mtn. requires engineering work.
- Upgrade of path is funded by PSIC Grant. Path upgrade contract will not be signed until PSIC funds are released. Funds will not be released until NEPA is completed.

Activity This Period

- DIR 126, SOW, and Quote to license Highflat to Timberline submitted to IM Project.
- Provision installation to monitor MW has been started

Issues affecting progress

- Site selection, accurate Lat and Long data, and site leases for the final hop into Billings via Greeno and Coburn from Shane Ridge needs to be completed. Dunn Mtn has been added to project for this path.
- Upgrade of Highflat to Timberline to support Trunking is on hold until PSIC funds are released. Release is dependant on NEPA being completed

Previous Activity

- Raising the antenna at High Flat did not fix the path as envisioned in the Gallatin Ring project. In addition to needing the antenna centerline raised, it has been

determined that the High Flat to Timberline hop has an interference issue. A new frequency has been found in the lower 6 gig band which will require new ODU's at Timberline and High Flat to be purchased as the existing equipment is for the high 6 gig band. DIR 115 and Quote from Harris Stratex has been sent to the IM Project for review and approval.

- Quote and Statement of Work for Timberline-Highflat hop received from Harris Stratex. DIR 115 written and submitted to IM Project Director for decision on moving forward.
- RFQ was sent to Harris Stratex to change the frequency and provide equipment to make the hop functional. Waiting for a final Statement of Work and quote from Harris Stratex.
- A change order was sent to the MTNG for 4 additional days work to address the software version install and other problems that came up when trying to turn on the T-1' to the LEC. MTNG has approved the change order and it is in procurement.
- Site audit report (detailed technical report of the existing equipment) was received from Harris Stratex, this report is needed to develop the RFQ for the South Leg.
- The ITPR process for the microwave engineering has been completed.
- Contract has been signed. Anticipate a mid June date for the work, Harris Stratex and Roger Smith (MHP) must coordinate the trip to all the sites.
- Engineering site walk was completed. A final design report is expected in about two weeks.
- Site walk report with existing equipment deficiencies completed.
- Issues to be corrected by Dunne Communications are being directed to Dunne Comm. by Kevin Bruski and Roger Smith.
- Final Design received from Harris Stratex

IM Project Managers For This Work:

- Microwave
 - Primary: Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
 - Backup: Mark Adams, (406) 443-8694, Mark.E.Adams@ngc.com

Southwest Loop

Current Overall Status

- I15-90 Consortium is working on site leases, and other preliminary issues. Microwave engineering site walks have been completed.

Issues that affect this project

- Weather and a short construction season will affect this build out.

Activity This Period

- No activity this week.

Previous Activity

- Engineering report has been received
- Quote for microwave engineering of the entire Southwest loop was sent back to Harris Stratex for revision and inclusion of language requested by PSSB
- Revised Statement of Work received from Harris Stratex.

- PSSB has submitted the revised Statement of Work to DOA for the ITPR review.
- ITPR for engineering of the Southwest Ring was approved
- Contract with Harris Stratex has been signed
- Engineering site visit is being planned for the second week of September.
- Site walks were completed with the Harris Stratex microwave transmission engineer

IM Project Managers For This Work:

- Microwave
 - Primary: Dave Clouse, (406) 443-8663, dave.clouse@ngc.com
 - Backup: Mark Adams, (406) 443-8694, mark.e.adams@ngc.com

Malmstrom AFB
WAC status and ongoing events, 20 November 2008

Overall general deployment understandings:

The Air Force (AF) is installing equipment and real property as listed under Detailed Deployment of WAC of this document. The AF will retain all ownership to all equipment and real property it installs. Interoperability Montana (IM) under a Memorandum of Understanding (MOU) will become responsible for all real property maintenance meeting AF standards. In addition all operations of the microwave equipment and maintenance to include the microwave dishes will be IM responsibility. AF will maintain all of its RF equipment to include the RF antennas. The MOU will also support the waiver request being sent to Secretary of the Air Force (SAF) for approval to build real property without having exclusive use of the real property. The MOU will be signed by AFSPC and the IM Executive Director (Mr. Kevin Bruski). In exchange for equipment and real property the AF provides that benefits IM the AF will be granted access to locations at no cost to the AF. AF expects to pay for utilities at locations where it has AF owned equipment. This will be accomplished under a separate utilities agreement. The AF will deploy in three distinct manners:

1. Entire site build up for the site the AF will have exclusive use of;
Highwood Baldy
2. Equipment install at locations where there are no real property actions;
Building 500, Flying J, Pacific Steel, Judith Peak, South Moccasin, and Sullivan Hill
3. Equipment and real property install at locations where sites has an existing lease with the IM representative;
Garniell, Cooney, Teton Ridge, and Belgian Hill

AFSPC has told us that once we have a license for locations listed in item 2 we can proceed with equipment install. Building 500 does not need any license since the AF owns this property and can install equipment on it as needed. In addition once we have the permit from the forest service for Highwood Baldy we can proceed with the site build out. These both can occur prior to the MOU being completed by AFSPC and the IM. The sites listed in item 3 cannot be done prior to SAF approval to construct on locations that the AF does not have exclusive use of. This will require the MOU to be completed as it is a supporting document to that waiver request.

Detailed deployment of WAC

- **Building 500 (Air Force):**

The AF will:

Install Stratex Eclipse Microwave

Install dish on top of building 500's support structure

Malmstrom AFB is working toward getting proper access to sites to support the WAC project. AFSPC is instrumental in helping us get the agreements in place. To that end they have broken the 10 sites into 3 tiers. Remember while there is effort at Malmstrom AFB, building 500, that is facility doesn't need to be in one of the tiers. I have incorporated the work effort for each site with the each of the tiers.

Tier 1; Highwood Baldy

- **Highwood Baldy:**

The AF will:

Purchase/Install Harris-Stratex Truepoint Microwave

Purchase/Install dishes on the tower and cable

Oversee T1's provisioning (turn on) in accordance with IM Project T-1 plan

Install AF RF trunking equipment inside the shelter

Install antenna's and cabling to RF equipment

Purchase/Install 150' Self supporting tower with ice bridge to shelter.

Purchase/Install tower foundation (concrete pad), shelter foundation and propane tank pad.

Purchase/Install shelter (12' X 30') with HVAC and a two filled 1000 gallon propane tank.

Purchase/Install power, meter and grounding for entire site.

Replace overhead power lines with underground lines, repair exposed lines and extend power to site (approx ¼ mile).

Purchase/Install 60kw generator.

Repair 3 miles of road with switch backs to allow truck access.

Helicopter support (if not supported by ANG, will need to get commercial helo support)

This group is focused on the AF getting the permit for Highwood Baldy. The 341 CES Real property office has submitted the forest service (2 Oct 2008) form 299 to obtain the permit from the Forest Service. The forest service states that it should take about a month to process. Permit should be at no cost to the government. There is also a road use agreement that the forest service requires that real property has forwarded to Base and AFSPC legal for review. Actions that need to be taken:

a. 341 CS/SCX – Site use agreement will need to be re-accomplished for this site because AF will hold the permit.

b. HQ AFSPC/A6 – A MOU that shows the AF responsible for its RF equipment and antennas. The MOU will show the IM maintaining the site and operating and maintaining the microwave to include the microwave dishes.

c. 341 CES/CERR – Utilities agreement with IM. Since the AF will hold the permit to this I assume the AF gets the bill and needs to collect from the IM for their share.

d. AFSPC JA determines action that needs to be taken for the road use agreement. If there is a maintenance cost associated with it then 341 CES will have to budget for road maintenance at this site.

e. SI International, site build out once permit is obtained. Included in there work will be an agreement with land owner at the bottom of Highwood Baldy to use land as staging area for helicopter support.

Tier 2; Pacific Steel, Flying J, Judith Peak, South Moccasin, and Sullivan Hill

- **Pacific Steel (Great Falls):**

The AF will:

Purchase/Install Stratex Eclipse Microwave (28 T capacity)

Hop to Flying J

Hop to Building 500

Purchase/Install dishes on the tower and cable

Path facing Flying J

Path facing Building 500

Oversee T1's provisioning (turn on) in accordance with IM Project T-1 plan

Install Dac4x card to drop two (2) T-1's at this site (IM)

- **Flying J:**

The AF will:

Purchase/Install Harris/Stratex Eclipse Microwave (Hop to Pacific Steel)

Purchase/Install Harris/Stratex Truepoint microwave Hop to Highwood Baldy

Purchase/install Harris/Stratex Truepoint microwave on existing dual pole

diversity antenna system facing Sullivan to complete the ring, (Hop Flying J to Sullivan)

Purchase/Install dishes on the tower and cable

Dish antenna system facing Pacific Steel

Dish antetnna system facing Highwood Baldy

Oversee T1's provisioning (turn on) in accordance with IM Project T-1 plan

Cross connect path from Pacific Steel to TruePoint MW at Flying J (true point path)

- **Judith Peak:**

The AF will:

Install AF RF trunking equipment inside the shelter

Install antenna's and cabling to RF equipment

Provision T-1's in accordance with IM Project T-1 plan

- **South Moccasin:**

The AF will:

Purchase/Install Harris/Stratex Truepoint Microwave

Hop to Highwood Baldy, 84 T capacity

Oversee T1's provisioning (turn on) in accordance with IM Project T-1 plan

Purchase/Install dishes on the tower and cable

Path facing Highwood Baldy
Install AF RF trunking equipment inside the shelter
Install antenna's and cabling to RF equipment
Oversee T1's provisioning (turn on) in accordance with IM Project T-1 plan

- **Sullivan Hill:**

The AF will:

Purchase/Install Harris/Stratex TruePoing Microwave facing Flying J and install on existing dual polarity antenna system facing Flying J to complete the ring.
Install AF RF trunking equipment inside the shelter
Install antenna's and cabling to RF equipment
Oversee T1's provisioning (turn on) in accordance with IM Project T-1 plan

This is the "License" group. All of these sites are completely built and are ready for occupancy. A license must be obtained to occupy and emplace the AF Trunking and Microwave equipment. Judith Peak already has the license paperwork done and that is currently being routed through Malmstrom channels for final signature (went to 341 MSG on 2 Oct 2008). South Moccasin is another BLM site and an easy license site. A request has been sent to the site manager for South Moccasin and the AF is awaiting a response. The final 3, (Flying J, Pacific Steel, and Sullivan Hill) all need language in their master lease to allow for the licensing. A request to the managers has been sent to have that language amendment made. We are still awaiting a response from them. Once we have license at these sites SI International can schedule and deploy equipment. Actions that need to be taken:

- a. 341 CS/SCX – Get final signature on site use agreement for Sullivan Hill.
- b. 341 CS/SCX – Develop and get signature for site use agreement for Flying J and Pacific steel.
- c. IM – Provide copy of amendment to site lease that adds provisions to allow the AF to license from the lease holder. Sites that still need to provide that documentation are Flying J, Pacific Steel, Sullivan Hill, and South Moccasin
- d. 341 CES/CERR - Obtain a license for Flying J, Pacific Steel, Sullivan Hill, and South Moccasin. Judith Peak already has a license in progress.
- e. HQ AFSPC/A6 – A MOU that shows the AF responsible for its RF equipment and antennas at Judith Peak, South Moccasin, and Sullivan Hill. The MOU will show the IM maintaining the site and operating and maintaining the microwave to include the microwave dishes at all 5 sites.
- f. 341 CES/CERR – Utilities agreement with IM. These sites are under the control of the IM thus they would get the bill from the utility companies and bill the AF for our usage.
- g. SI International deploy equipment once licenses are obtained.

Tier 3; Teton Ridge, Belgian Hill, Garniell, and Cooney

- **Belgian Hill:**

The AF will:

Purchase/Install small shelter (10' x 12') for AF RF trunking equipment.

Install antenna's and cabling to RF equipment

Purchase/Install conduit and ice bridge from IM shelter to bring Microwave circuits to trunking equipment

Purchase/Install electrical connection with separate meter base to existing generator

Purchase/Install foundation and add transfer switch.

Purchase/Install equipment to breakout Microwave bandwidth, 6 T-1's (4-USAF and 2-IM)

Oversee T1's provisioning (turn on) in accordance with IM Project T-1 plan

- **Garneill:**

The AF will:

Have installed 2 miles of underground power line to the site and the 200 amp service.

Used to have overhead power to site, and that has been removed. Site owned by State of Montana with easement to site through ranchers land.

Fergus Electric will install power line.

Purchase/Install a 25kw generator and transfer switch

Provide a filled 1000 gallon propane tank

Repair cattle fence around the site. .

Oversee T1's provisioning (turn on) in accordance with IM Project T-1 plan

- **Teton Ridge:**

The AF will:

Remove old fence and install new 8' security chain link fence.

Install concrete pad for 60kw generator

Purchase/Install a 60kw generator (~~concrete pad already existing~~) and filled 1000 gallon propane tank.

Purchase/Install equipment to breakout Microwave bandwidth, 6 T-1's (4-USAF and 2-IM)

Oversee T1's provisioning (turn on) in accordance with IM Project T-1 plan

- **Cooney:**

The AF will:

Purchase/Install 150' Self supporting tower with ice bridge to shelter.

Purchase/Install tower foundation (concrete pad), shelter foundation and propane tank pad.

Purchase/Install shelter (12' X 30') and a filled 1000 gallon propane tank.

Purchase/Install power line, meter and grounding for entire site.

Purchase/Install chain link fence.

Install AF RF trunking equipment inside the shelter

Install antenna's and cabling to RF equipment

Oversee T1's provisioning (turn on) in accordance with IM Project T-1 plan

This is the “Has Real Property” group. Each of these sites have real property slated to be placed at them by the AF. Since AF instructions don’t allow for real property placement unless the AF has “exclusive use of the real property” (AFI 32-9001, para 1.6) AFSPC will go to the SAF to ask for exception/waiver of this requirement. This will allow us to enter into a license with these properties and place real property on them. Actions that need to be taken:

- a. 341 CS/SCX – Get final signature on site use agreement for Teton Ridge.
- b. 341 CS/SCX – Develop and get signature for site use agreement for Garneill.
- c. IM – Provide copy of amendment to site lease that adds provisions to allow the AF to license from the lease holder. Sites that still need to provide that documentation are Garniell, Belgian Hill, and Teton Ridge.
- d. 341 CES/CERR - Obtain a license for all sites.
- e. HQ AFSPC/A6 – A MOU that shows the AF responsible for its RF equipment and antennas at Cooney, Belgian Hill, and Teton Ridge. The MOU will show the IM maintaining the site and operating and maintaining the microwave to include the microwave dishes at all 3 sites.
- f. 341 CES/CERR – Utilities agreement with IM. These sites are under the control of the IM thus they would get the bill from the utility companies and bill the AF for our usage.
- g. HQ AFSPC/A6 – Obtain waiver from SAF to allow for real property construction on sites the AF does NOT have exclusive right to.
- h. SI International deploy sites after SAF waiver obtained

In addition to the work effort at the 11 sites, we need not forget that we still have to deploy the consolettes out to each of the MAF’s, place fleetmaps in all the radios, make sure AES Encryption is working 100% across the board, and be prepared for any other unexpected tasks to keep the system functioning.

If I have ANY of this information wrong, or have targeted the wrong entities for work, please be sure to speak up so we can keep this project moving forward.

David Hinds
341 CS/SCX
Project Manager
DSN 632-7007, Commercial (406) 731-7007
Fax: x-7551